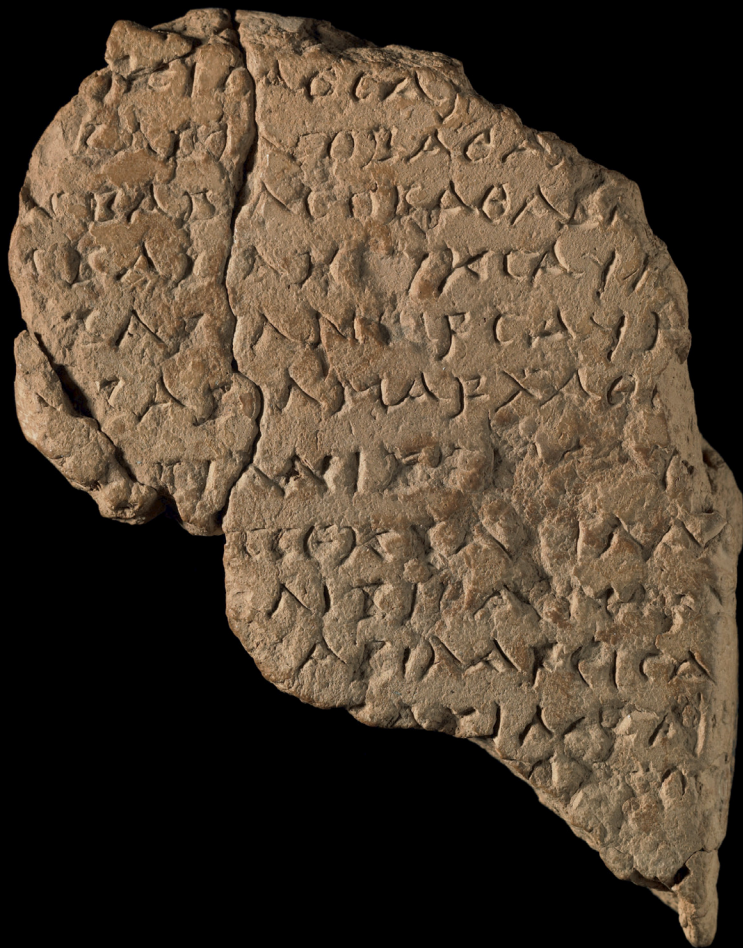




CAMBRIDGE CLASSICAL STUDIES

*Between Greece
and Babylonia*

*Hellenistic Intellectual History in
Cross-Cultural Perspective*

KATHRYN STEVENS

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BETWEEN GREECE AND BABYLONIA

This book argues for a new approach to the intellectual history of the Hellenistic world. Despite the intense cross-cultural interactions which characterised the period after Alexander, studies of 'Hellenistic' intellectual life have tended to focus on Greek scholars and institutions. Where cross-cultural connections have been drawn, it is through borrowing: the Greek adoption of Babylonian astrology; the Egyptian scholar Manetho deploying Greek historiographical models. In this book, however, Kathryn Stevens advances a 'Hellenistic intellectual history' which is cross-cultural in scope and goes beyond borrowing and influence. Drawing on a wide range of Greek and Akkadian sources, she argues that intellectual life in the Greek world and Babylonia can be linked not just through occasional contact and influence, but also by deeper parallels in intellectual culture that reflect their integration into the same overarching imperial system. Tracing such parallels yields intellectual history which is diverse, multi-polar and, therefore, truly 'Hellenistic'.

KATHRYN STEVENS is Associate Professor in Classics and Ancient History at Durham University. Her main research interests are in Greek and Mesopotamian cultural and intellectual history, with a particular focus on the Hellenistic period. She has published articles on Greek geography, Seleucid kingship, ancient libraries and localism in the Hellenistic world, and is currently co-editing the first collected volume on the Astronomical Diaries from Babylon, entitled *Keeping Watch in Babylon: The Astronomical Diaries in Context* (with J. Haubold and J. Steele).

CAMBRIDGE CLASSICAL STUDIES

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KATHRYN STEVENS

University of Durham



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For Anne and Gillian Stevens

For Tosca

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A NOTE ON transliteration, transcription and translation

Absolute consistency in the English rendering of Greek, Latin and Akkadian names can lead to forms which depart considerably from common usage and even impede recognition of known individuals and localities. My practices have been governed by a combination of factors, which leads overall to inconsistency but, I hope, greater clarity. I have used Anglicised forms where these are commonly known (Ptolemy, Aristotle, Aššurbanipal, Pliny; Athens, Babylon, Sippar). Some Greek names have been Latinised where this form is more common in English – for instance Athenaeus, Miletus – while Greek authors and places never or rarely attested in a Latinised form are transliterated strictly – thus Semos of Delos, Harmodios of Lepreon, and the river Akesines. Akkadian place names are given in transliteration or transcription where this is conceptually appropriate or useful to the reader (e.g. Mišir rather than Egypt in discussions of Babylonian geography); Akkadian proper names with no common Anglicised form are transcribed with diacritics in accordance with Assyriological conventions (Anu-bēlšunu, Nabû). In references to cuneiform tablet line numbers, the presence of the symbol ' indicates that the initial lines of the tablet are lost, so that the number is based on the preserved lines, e.g. obv. 10' indicates line 10 of the preserved text on the obverse of a tablet where an unknown number of lines are lost at the start.

Translations are my own unless otherwise indicated.

ABBREVIATIONS

A	Cuneiform tablet collections of the Oriental Institute, University of Chicago
<i>AAntHung</i>	<i>Acta antiqua Academiae Scientiarum Hungaricae</i>
<i>AB</i>	<i>Assyriologische Bibliothek</i> . Leipzig, 1881–1933.
<i>ABC</i>	A. K. Grayson, <i>Assyrian and Babylonian Chronicles</i> . Locust Valley, NY, 1975.
<i>ACT</i>	O. Neugebauer, <i>Astronomical Cuneiform Texts</i> (3 vols). London, 1955.
<i>AClass</i>	<i>Acta Classica: verhandelinge van die Klassieke Vereniging van Suid-Afrika</i>
<i>AD</i>	A. Sachs and H. Hunger, <i>Astronomical Diaries and Related Texts from Babylonia</i> (6 vols). Vienna, 1988–.
<i>AfO</i>	<i>Archiv für Orientforschung</i>
<i>AHB</i>	<i>Ancient History Bulletin</i>
<i>AHES</i>	<i>Archive for History of Exact Sciences</i>
<i>AHR</i>	<i>The American Historical Review</i>
<i>AIHS</i>	<i>Archives internationales d'histoire des sciences</i>
<i>AJA</i>	<i>American Journal of Archaeology</i>
<i>AJPh</i>	<i>American Journal of Philology</i>
<i>Ann. Sci.</i>	<i>Annals of Science</i>
<i>AOAT</i>	<i>Alter Orient und Altes Testament</i> . Kevelaer/Neukirchen-Vluyn, 1969.
<i>ASAA</i>	<i>Annuario della Scuola Archeologica di Atene e delle Missioni Italiane in Oriente</i>
Ash. Mus.	Cuneiform tablet collections of the Ashmolean Museum, Oxford
<i>ASNP</i>	<i>Annali della Scuola Normale Superiore di Pisa, Classe di Lettere e Filosofia</i>
<i>BAAS</i>	<i>Bulletin of the American Astronomical Society</i>
<i>BaBesch</i>	<i>Bulletin antieke Beschaving</i>

List of Abbreviations

<i>BagM</i>	<i>Baghdader Mitteilungen</i>
<i>BCH</i>	<i>Bulletin de Correspondance Hellénique</i>
<i>BCHP</i>	I. Finkel and R. J. van der Spek, <i>Babylonian Chronicles of the Hellenistic Period</i> (preliminary online editions at www.livius.org/cg-cm/chronicles/chronoo.html)
<i>Bib. Or.</i>	<i>Bibliotheca Orientalis</i>
<i>BICS</i>	<i>Bulletin of the Institute of Classical Studies</i>
<i>BM</i>	British Museum collections
<i>BMCR</i>	<i>Bryn Mawr Classical Review</i>
<i>BNJ</i>	<i>Brill's New Jacoby</i> , ed. I. Worthington. Online publication: https://referenceworks.brillonline.com/browse/brill-s-new-jacoby
<i>BOR</i>	<i>The Babylonian and Oriental Record</i> . London, 1886–1901.
<i>BRM</i>	<i>Babylonian Records in the Library of J. Pierpont Morgan</i> . New York and New Haven, 1912–1923.
<i>CAD</i>	<i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> (21 vols). Chicago, 1956–2010.
<i>CAH</i>	<i>The Cambridge Ancient History</i> . Cambridge
<i>CCAG</i>	<i>Catalogus Codicum Astrologorum Graecorum</i> (12 vols). Brussels, 1898–1953.
<i>CCGG</i>	<i>Cahiers du Centre Gustave Glotz</i>
<i>CID</i>	<i>Corpus des Inscriptions de Delphes</i> . Paris, 1978–.
<i>CM</i>	J.-J. Glassner, <i>Mesopotamian Chronicles</i> . Leiden and Boston, 2005.
<i>CMG</i>	<i>Corpus Medicorum Graecorum</i> . Berlin, 1908–.
<i>CQ</i>	<i>Classical Quarterly</i>
<i>CR</i>	<i>Classical Review</i>
<i>CRAI</i>	<i>Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres</i>
<i>CT</i>	<i>Cuneiform Texts from Babylonian Tablets in the British Museum</i> . London, 1896–.
<i>EAD</i>	<i>Exploration archéologique de Délos</i> . Paris, 1909–.
<i>EI</i>	<i>Epigraphia Indica</i>
<i>FD</i>	<i>Fouilles de Delphes</i> . Paris, 1908–.

List of Abbreviations

<i>FGrHist</i>	F. Jacoby, <i>Die Fragmente der griechischen Historiker</i> . Berlin and Leiden, 1923–1958.
<i>FHG</i>	K. Müller, <i>Fragmenta Historicorum Graecorum</i> . Paris, 1841–1870.
<i>FHSG</i>	W. Fortenbaugh, P. Huby, R. Sharples, and D. Gutas (eds.) <i>Theophrastus of Eresus: Sources for his Life, Writings, Thought and Influence</i> . Leiden, New York and Cologne, 1993–.
<i>G&R</i>	<i>Greece & Rome</i>
<i>GDBT</i>	E. F. Weidner, <i>Gestirn-Darstellungen auf babylonischen Tontafeln</i> . Vienna, Graz and Cologne, 1967.
<i>GRBS</i>	<i>Greek, Roman, and Byzantine Studies</i>
<i>H&T</i>	<i>History and Theory</i>
<i>Hist. Sci.</i>	<i>History of Science</i>
<i>HSCP</i>	<i>Harvard Studies in Classical Philology</i>
<i>HSM</i>	Cuneiform tablet collections of the Harvard Semitic Museum
<i>HTR</i>	<i>Harvard Theological Review</i>
<i>I.Délos</i>	F. Durrbach <i>et al.</i> , <i>Inscriptions de Délos</i> . Paris, 1926–1950.
<i>I.Ephesos</i>	H. Wankel <i>et al.</i> , <i>Die Inschriften von Ephesos</i> (8 vols). Bonn, 1979–1984.
<i>I.Lindos</i>	C. Blinkenberg, <i>Lindos, Fouilles et Recherches, II. Fouilles de l'Acropole. Inscriptions</i> . Berlin, 1941.
<i>I.Magnesia</i>	O. Kern, <i>Die Inschriften von Magnesia am Maeander</i> . Berlin, 1900.
<i>I.Priene</i>	F. Hiller von Gaertringen, <i>Inschriften von Priene</i> . Berlin, 1906.
<i>IG</i>	<i>Inscriptiones Graecae</i>
<i>IM</i>	Cuneiform tablet collections of the Iraq Museum, Baghdad
<i>IOSPE</i>	Latyshev, V. <i>Inscriptiones antiquae orae septentrionalis Ponti Euxini graecae et latinae</i> . St Petersburg, 1885–1901.

List of Abbreviations

<i>ISE</i>	Moretti, L. <i>Iscrizioni storiche ellenistiche. I. Attica, Peloponneso, Beozia; II. Grecia centrale e settentrionale</i> . Florence 1967–1975.
<i>JA</i>	<i>Journal Asiatique</i>
<i>JAOS</i>	<i>Journal of the American Oriental Society</i>
<i>JCS</i>	<i>Journal of Cuneiform Studies</i>
<i>JESHO</i>	<i>Journal of the Economic and Social History of the Orient</i>
<i>JHA</i>	<i>Journal for the History of Astronomy</i>
<i>JHI</i>	<i>Journal of the History of Ideas</i>
<i>JHS</i>	<i>The Journal of Hellenic Studies</i>
<i>JNER</i>	<i>Journal of Near Eastern Religions</i>
<i>JMC</i>	<i>Le Journal des Médecines Cunéiformes</i>
<i>JNES</i>	<i>Journal of Near Eastern Studies</i>
<i>JPH</i>	<i>Journal of the Philosophy of History</i>
<i>JRAS</i>	<i>Journal of the Royal Asiatic Society</i> (formerly <i>Journal of the Royal Asiatic Society of Great Britain and Ireland</i>)
<i>JRS</i>	<i>The Journal of Roman Studies</i>
<i>JSSEA</i>	<i>Journal of the Society for the Study of Egyptian Antiquities</i>
<i>JTS</i>	<i>The Journal of Theological Studies</i>
<i>K</i>	Kuyunjik Collection, British Museum, London
<i>LBAT</i>	A. Sachs, T. Pinches and J. N. Strassmaier, <i>Late Babylonian Astronomical and Related Texts</i> . Providence, 1955.
<i>LGPN</i>	<i>Lexicon of Greek Personal Names</i> . Oxford, 1987–.
<i>MAA</i>	<i>Journal of Mediterranean Archaeology and Archaeometry</i>
<i>MIO</i>	<i>Mitteilungen des Instituts für Orientforschung</i>
<i>MLC</i>	Yale Babylonian Collection, Morgan Library Collection
<i>MUSJ</i>	<i>Mélanges de l'Université Saint-Joseph</i>
<i>NABU</i>	<i>Nouvelles Assyriologiques Brèves et Utilitaires</i>
<i>OLP</i>	<i>Orientalia Lovaniensia Periodica</i>
<i>OLZ</i>	<i>Orientalistische Literaturzeitung</i>
<i>PAPhS</i>	<i>Proceedings of the American Philosophical Society</i>

List of Abbreviations

<i>PSBA</i>	<i>Proceedings of the Society for Biblical Archaeology</i>
<i>P.Gen.</i>	<i>Les Papyrus de Genève</i> . Geneva, 1896–1900.
<i>P.Hib.</i>	<i>The Hibeh Papyri</i> . London, 1906–1955.
<i>P.Oxy</i>	<i>The Oxyrhynchus Papyri</i> . London, 1898–.
<i>P.Oxy.Astr</i>	A. Jones, <i>Astronomical Papyri from Oxyrhynchus</i> (2 vols). Philadelphia, 1999.
<i>PNA</i>	<i>The Prosopography of the Neo-Assyrian Empire</i> . Helsinki, 1998–2011.
<i>PP</i>	<i>La Parola del Passato</i>
<i>P&P</i>	<i>Past and Present</i>
<i>RA</i>	<i>Revue d'assyriologie et d'archéologie orientale</i>
<i>REG</i>	<i>Revue des études grecques</i>
<i>RIMA</i>	<i>The Royal Inscriptions of Mesopotamia: Assyrian Periods</i> . Toronto, 1987–.
<i>RINAP</i>	G. Frame, <i>The Royal Inscriptions of Mesopotamia: Neo-Assyrian Period</i> . Toronto, 1995–.
<i>RIA</i>	<i>Reallexikon der Assyriologie und vorderasiatischen Archäologie</i> . Berlin and Leipzig, 1932–.
<i>SAA</i>	<i>State Archives of Assyria</i> . Helsinki, 1987–.
<i>SAAB</i>	<i>State Archives of Assyria Bulletin</i>
<i>SAAS</i>	<i>State Archives of Assyria Studies</i>
<i>SAS</i>	<i>South Asian Studies</i>
<i>SCI</i>	<i>Scripta Classica Israelica</i>
<i>SCIAMVS</i>	<i>SCIAMVS: Sources and Commentaries in the Exact Sciences</i>
<i>SEG</i>	<i>Supplementum Epigraphicum Graecum</i> . 1923–.
<i>SGDI</i>	H. Collitz (ed.), <i>Sammlung der griechischen Dialekt-Inschriften</i> (4 vols). Göttingen, 1884–1889.
<i>StOr</i>	<i>Studia Orientalia</i>
<i>SpTU</i>	<i>Spätbabylonische Texte aus Uruk</i> : I, H. Hunger, 1976; II–V, E. von Weiher, 1983–1998.
<i>TAPA</i>	<i>Transactions of the American Philological Association</i>
<i>TCL</i>	<i>Textes Cunéiformes, Musée du Louvre</i> . Paris, 1910–.
<i>Tit. Cam.</i>	M. Segre and G. P. Carratelli, ‘Tituli Camirenses’, in <i>ASatene</i> 27–29, n.s. 11–13 (1949–1951): 141–318.

List of Abbreviations

UCP	<i>University of California Publications in Semitic Philology</i> . Berkeley, 1907–.
UET	<i>Ur Excavations: Texts</i> . London, 1928–.
UVB	<i>Vorläufiger Bericht über die . . . Ausgrabungen in Uruk-Warka</i> .
VAB	<i>Vorderasiatische Bibliothek</i> . Leipzig, 1907–16.
VAT	Berlin Museum collections (Vorderasiatische Abteilung. Tontafeln)
YOS	<i>Yale Oriental Series</i>
ZA	<i>Zeitschrift für Assyriologie und vorderasiatische Archäologie</i>
ZPE	<i>Zeitschrift für Papyrologie und Epigraphik</i>
ZOA	<i>Zeitschrift für Orient-Archäologie</i>
ZVS	<i>Zeitschrift für vergleichende Sprachforschung</i>

Abbreviations for Classical authors and works follow the Oxford Classical Dictionary (4th edition), with the addition of:

Ar.	<i>Aristeae ad Philocratem epistula</i> (ed. Hadas 1951)
Epiph. <i>De mens.</i>	Epiphanius, <i>De mensuris et ponderibus</i>
Gal. <i>Hipp. Epid.</i>	Galen, <i>In Hippocratis Epidemiarum libros commentaria</i> (CMG V.10.1–2)
Gal. <i>HNH</i>	Galen, <i>In Hippocratis De Natura Hominis commentaria</i> (CMG V.9.1)
Hipp. <i>Comm. Arat.</i>	Hipparchus, <i>In Arati et Eudoxi Phaenomena commentarium</i> (ed. Manitius 1894)
Iren. <i>Adv. Haer.</i>	Irenaeus, <i>Adversus haereses</i>
Philo Mos.	Philo, <i>De Vita Mosis</i>
PN	[Pseudo-Scymnus], <i>Periodos to Nicomedes</i> (ed. Marcotte 2000)
Sync.	Syncellus, <i>Ecloga chronographica</i> (ed. Mosshammer 1984)
Tzetz. <i>Proleg.</i>	Tzetzes, <i>Prolegomena de comoedia Aristophanis</i> (ed. Koster 1975)
Vit. <i>Arat.</i>	<i>Vitae Arati</i> (ed. Martin 1974)

CHAPTER 1

IN SEARCH OF HELLENISTIC INTELLECTUAL HISTORY

The unity of the Hellenistic world . . . was a unity which comprised the whole of the Greeks (including those of the mother country) but not the whole population of the Eastern monarchies, where it was restricted to its Greek superstructure.¹

Between the late fourth and early third century BC, the political and cultural landscapes of the Mediterranean and Near East were transformed. The conquests of Alexander the Great and the formation of the successor kingdoms after his death restructured political, socio-cultural and economic relations across an area stretching from western Europe to central Asia. Forged in the flames of Persepolis and quenched with the blood of potential successors and unwilling subjects alike, from the fragments of Alexander's empire there arose what we call the Hellenistic world. For the first time, communities from the urban heartlands of Greece to the steppes of modern-day Afghanistan became part of the same interlocking imperial system, linked to the Macedonian kingdoms by relations ranging from occasional diplomatic contact to direct subordination. Diaspora groups of Greeks and Macedonians settled in the string of Alexandrias, Seleucias and Antiochs that stamped Graeco-Macedonian imperialism onto the physical and cultural geography of the Near East, marrying with local populations, acting as vectors of cross-cultural contact and establishing or intensifying links of trade and exchange between these areas and the Mediterranean world. Macedonian kingship and Greek cultural practices were enacted across a vastly expanded geographical and socio-cultural arena, and were themselves transformed in the process.

These overarching political and socio-cultural changes also had an impact on intellectual life. Under the lavish and competitive

¹ Rostovtzeff 1941: 1053.

patronage of the Hellenistic kings, scholars from all over the Greek-speaking world gathered in and circulated between the Hellenistic royal capitals: Antioch, Pergamon, Pella, and above all, Alexandria. The vast resources of the royal courts and the kings' collections of both books and scholars catalysed Greek intellectual activity across all disciplines. This was the period in which Eratosthenes calculated the circumference of the Earth to a remarkable degree of accuracy, and his correspondent Archimedes computed the number of grains of sand required to fill the universe.² It was also a period which saw cross-cultural exchange in the intellectual sphere as in other cultural domains. Greek script, language and literature were adopted and adapted as far east as Bactria and India, while elements from the intellectual traditions of other cultures in turn found their way into Greek scholarship: astronomical and astrological concepts from Babylonia; new medical techniques and pharmaceuticals from Egypt.³ Rarely, we can pinpoint culturally and intellectually 'bilingual' or 'multilingual' individuals whose writings exemplify or elucidate these processes of cross-cultural transmission. Perhaps the best-known are two men – one Egyptian, one Babylonian – who wrote about their respective homelands in Greek: Manetho, a priest from Sebennytos in the Nile Delta, who integrated Egyptian and Greek sources and concepts in his *Aegyptiaca*, and Berossus of Babylon, another priestly figure whose *Babyloniaca* reflects a similar intertwining of Greek and Babylonian traditions and conceptual frameworks.⁴

² The only detailed ancient account of Eratosthenes' method for calculating the circumference of the Earth is Cleomedes *Caelestia* 1.7.64–110 (ed. Todd 1990); for the major ancient witnesses to the calculation see Roller 2010, Appendix 1. For a hypothesis which attempts to reconcile the two different figures for the circumference attributed to Eratosthenes (250,000 and 252,000 stadia respectively), see Carman and Evans 2015. Archimedes computed the 'number of sand' in the universe in the *Sand-Reckoner* (*Psammites*): the most recent edition is Mugler 1971.

³ On astronomy and astrology see Chapter 2; Egyptian influence on Graeco-Roman medicine: Ritner 2000: 114–16 on enema techniques, pulse taking and the introduction of certain drugs in Alexandrian medicine as due to Egyptian influence; for a more sceptical view cf. for the Hellenistic period Von Staden 1989: 1–31 and more generally Jouanna 2012 with a survey of earlier contributions to the debate.

⁴ On Manetho see Dillery 1999; 2015; Moyer 2011: Chapter 2 with earlier bibliography. On Berossus see Chapter 3.

Despite the intense cultural interactions which characterised the period after Alexander, when it comes to intellectual life Hellenistic historians tend to focus on the Hellenic – indeed, the panhellenic. Centre stage is usually occupied by the Museum and Library of Ptolemaic Alexandria, the rival intellectual milieu of Attalid Pergamon, and the learned Greek scholarship that took place in both centres: the editing of the Homeric poems; intensive philological analysis of Greek and its dialects; the composition of densely allusive poetry which showcased (and required of its audience) a profound knowledge of Greek myth and literature. Meanwhile, back in the ‘old Greek world’, Athens maintains a starring role as a centre for (Greek) philosophy, whose schools drew adherents from across all the kingdoms.⁵ When a cross-cultural element is added to the analysis, it is usually tied into this prevailing paradigm; for instance, by tracing Greek utilisation of ‘local’ concepts or data, linking Manetho and Berossus to the Hellenistic kings, or connecting their works and those of other foreign scholars to the libraries of Alexandria and Pergamon.⁶ This is not surprising given the challenges of the sources and the

⁵ To give only a few examples from synoptic works of the last two decades, the *Blackwell Guide to Hellenistic Literature* (Gutzwiller 2008) focuses only on Greek literature; the more recent *Companion to Hellenistic Literature* has welcome chapters on Jewish and Egyptian literature, but the predominant focus is on Alexandrian literary production. The chapters on Arts and Sciences in the *Blackwell Companion to the Hellenistic World* (Ersine 2003b) examine Greek medicine (Alexandria), Greek philosophy (mainly Athens), and Greek literature, with the telling lament that we know ‘far too little about Greek literature [my italics] reflecting the cultural interchange of the high Hellenistic period’ (Hunter 2003a: 478). The *Cambridge Companion* (Bugh 2006) includes chapters on historiography and rhetoric, philosophy and science and technology, of which only the last engages with non-Greek scholarship in tracing Greeks’ utilisation of Egyptian and Mesopotamian medical and astronomical knowledge; the entry on Hellenistic Scholarship in the *Wiley Encyclopedia of Ancient History* focuses exclusively on Greek intellectual production (Schironi 2016). There are important exceptions, but they are specialist works on particular disciplines or contexts, such as the body of work on intercultural poetics at Alexandria (e.g. Stephens 2003; Petrovic 2014), or the historiography of ancient astronomy and astrology which has long adopted a more cross-cultural perspective because of the interconnections between Babylonian, Egyptian and Graeco-Roman traditions (see further Chapter 2). In mainstream, introductory and popular works, ‘Hellenistic’ intellectual production remains Hellenic or Hellenocentric.

⁶ E.g. Keyser and Irby-Massie 2006 trace Hipparchus’ debt to Babylonian astronomy and astrology and claim that ‘Local traditions, especially in Egypt and Mesopotamia, continued to be woven into the tapestry of medicine in the Greek eastern Mediterranean’ (253). Dillery 2015 suggests that Manetho and Berossus were inspired by their exposure to Greek historiography via the Hellenistic courts. On the case for foreign works in the Library of Alexandria see Chapter 4.

deep imprint, imaginative as well as substantive, that Alexandria and its analogues left on western scholarship. But a Hellenocentric approach which focuses on the dominant centres of scholarship is not the only paradigm available for Hellenistic intellectual history.

Active around the same time as Eratosthenes, Archimedes, Manetho and Berossus were two men whose intellectual horizons and accomplishments were rather more circumscribed. Neither of them, as far as we know, entered into the cosmopolitan intellectual world of superstars like Eratosthenes and Archimedes. Nor would they ever ordinarily occupy the same page in any work of 'Hellenistic' history, for they lived thousands of miles apart, spoke and wrote in different languages and came from very dissimilar cultural environments. The first, Semos, was from the Aegean island of Delos; the second, Anu-aḥa-ušabši, lived in the southern Babylonian city of Uruk. Semos spoke and wrote Greek, a language which at the time had ever-increasing numbers of users, and his work has been transmitted to us, in fragments, through Athenaeus and other later Greek authors.⁷ By contrast, Anu-aḥa-ušabši was a member of a small and shrinking scholarly elite which studied and wrote texts in two already ancient languages: Sumerian, a linguistic isolate which had died out as a spoken language in Mesopotamia nearly two millennia previously, and Akkadian, a Semitic language related to Hebrew and Arabic which probably ceased to be spoken as a first language several centuries before his birth. Anu-aḥa-ušabši's own mother tongue was Aramaic, and it is possible that he also knew Greek, but all we know of his intellectual activity comes from clay tablets inscribed with texts in Akkadian and Sumerian which he wrote or owned; in contrast to the continuous tradition which preserved Semos' work, Anu-aḥa-ušabši's tablets and the knowledge they contained lay beneath the soil in Uruk for over two thousand years awaiting discovery and decipherment. Semos and Anu-aḥa-ušabši never met, and might never have understood each other if they had. Their surviving writings betray no mutual knowledge of, or interest in, each other's culture or history, nor do they contain any borrowed motifs or concepts which might implicitly reveal cross-

⁷ *FGrHist/BNJ* 396.

cultural contact. Yet there are other reasons to connect these two individuals.

Despite the geographical and cultural gulfs that separate them, the lives and work of Semos and his Babylonian counterpart are in many ways parallel. Both came from elite families whose members had for generations played a key role in the political and religious life of their local communities – communities which in turn were important centres within their respective regions and whose temples attracted the patronage of Hellenistic monarchs. Both men were closely connected with these temples, and this connection is reflected in their writings in similar ways, from the subjects they selected to the privileged knowledge of local religious practice evident in their work. Beyond their local contexts, Semos and Anu-aḥa-ušabši also shared the same macro-regional political framework: both were living in a world of competing Macedonian kingdoms, and in their surviving works it is possible to detect similar intellectual responses to that broader imperial world. Both produced historical works which assert the significance of their local temple or city, at a time when communities large and small across the Mediterranean and Near East were concerned to safeguard their autonomy and identity in a world dominated by new dynastic powers. Some of the strategies they use to assert that significance are very similar, and reappear in a variety of literary and epigraphic compositions produced by Greek and non-Greek groups for local, international and royal audiences. From this perspective, Semos and Anu-aḥa-ušabši can be aligned closely with each other as local scholars advocating for their communities in ways that transcended linguistic and cultural difference.

In terms of his social position and his intellectual career and interests, Semos of Delos has a considerable amount in common with his Babylonian contemporary, indeed perhaps more than with some of his more famous Greek peers like Eratosthenes or Archimedes. This observation provokes several important questions about intellectual life during the Hellenistic period, and its relationship to political and cultural boundaries. To what extent were individuals' intellectual activities determined by their cultural background, and independent of the large-scale socio-political structures

or shifts which mark the period between Alexander's conquest and the battle of Actium? Apart from isolated instances of cross-cultural contact, were the intellectual histories of different cultural regions separate, or are there aspects of intellectual life characteristic of the period that can be seen to transcend cultural boundaries? In sum, what, if anything, rendered intellectual activity in third or second-century Athens and Babylon similarly 'Hellenistic', as well as Greek or Babylonian?

These are the overarching questions behind this book, which focuses on the specific case of Greek and Mesopotamian intellectual culture. Its central concerns are twofold. On the one hand, it offers a new approach to the long-standing problem of how to connect the intellectual histories of the Greek world and Mesopotamia, during a period when these two regions and their cultures were brought into closer contact than ever before by the Graeco-Macedonian conquest and settlement of the Near East. On the other, it attempts to formulate a new paradigm for Hellenistic intellectual history. Using the Greek world and Babylonia as a test case, it asks whether there are elements of intellectual life in the Hellenistic world which transcend cultural and linguistic divisions and are fully 'Hellenistic' in the sense of being co-extensive with the broader structures or boundaries of that world, and conditioned by its particular political or socio-cultural phenomena. To borrow a distinction used by Peregrine Horden and Nicholas Purcell in their magisterial study of the Mediterranean, it is an attempt at writing intellectual history *of*, not only intellectual history *in*, the Hellenistic world.⁸

1.1 'Hellenistic Intellectual History'

Many Hellenistic histories exist. Among general accounts, Frank Walbank's learned and lucid introduction to the Hellenistic world has been joined by a profusion of treatments in the last two decades: Graham Shipley's *Greek World After Alexander*, Malcolm Errington's *History of the Hellenistic World*, Hans-Joachim Gehrke's *Geschichte des Hellenismus*, Peter Green's

⁸ Horden and Purcell 2000: 2–4 and *passim*.

provocative and dystopian vision of the closing centuries of the first millennium BC, Peter Thonemann's brief and exhilarating introduction, and now also (for a more popular audience) Angelos Chaniotis' *Age of Conquests*.⁹ For political history Edouard Will's *Histoire politique du monde hellénistique* and Claire Préaux's *Le monde hellénistique* remain authoritative;¹⁰ for social and economic history, Michael Rostovtzeff's three-volume masterpiece, whatever its difficulties, is still unmatched in scope and detail.¹¹ As yet, however, there is no intellectual history of the Hellenistic world. This does not mean that historians have neglected the intellectual life of the Hellenistic period; quite the opposite. Surveys, companions and handbooks highlight selected phenomena as 'Hellenistic'; histories of ancient philosophy, science or literature sketch developments in specific (Greek) disciplines during the period; Peter Fraser's *Ptolemaic Alexandria* stretches well beyond its stated remit to elucidate intellectual life in the wider Greek world.¹² But there are no overarching or synthetic studies, and certainly no intellectual history which is fully 'Hellenistic' in the sense of being coterminous with the Hellenistic world as a whole, and not just its Greek-speaking parts.

One of the driving questions behind this book is what such a history might look like; where its boundaries would lie; what, if any, its themes would be. More specifically, it asks whether there are particular characteristics or trends which link intellectual life in different geographical, cultural and linguistic zones of the Hellenistic world, making 'Hellenistic intellectual culture' a coherent concept and fruitful object of study. In other words, is it meaningful to speak of 'Hellenistic intellectual history' which encompasses multiple cultural and linguistic traditions, in the same way as Hellenistic political and economic histories now regularly integrate them? This study contends that it is, and seeks to provide an example of how such history might be written. Tracing connections between the lives and work of Greek and Babylonian scholars which go beyond the transmission of Babylonian doctrines in Greece and the adoption of Greek

⁹ Walbank 1993; Shipley 2000; Gehrke 2008; Green 1990; Thonemann 2016; Chaniotis 2018.

¹⁰ Will 1982; Préaux 1978. ¹¹ Rostovtzeff 1941. ¹² Fraser 1972.

language and intellectual traditions in Babylonia, it offers a further challenge to Rostovtzeff's contention – quoted at the head of this chapter – that the social and cultural unity of the Hellenistic world was restricted to the Greekness which linked its political elites, itself often 'no more than a thin veneer'.¹³

A statement of intent to write 'Hellenistic intellectual history' immediately generates two questions of definition. The first is, 'what counts as Hellenistic?' The second is, 'what counts as intellectual history?' In a meaningful sense, the answers to these questions form not the departure point but the ultimate object of this book. Nonetheless, the following aims to establish some basic navigational aids.

1.1.1 Intellectual History

In 1985, the well-known intellectual historian John Pocock remarked that, after reading two recent collections of essays on the subject, he was 'persuaded that whatever "intellectual history" is, and whatever "the history of ideas" may be, I am not engaged in doing either of them'.¹⁴ This comment serves to highlight both the plurality of approaches to what its practitioners call 'intellectual history', and the absurdities that can result from an excessive concern for disciplinary definition. In general, my methodological sympathies are with Stefan Collini's argument that 'the richness of characterisation and fineness of discrimination needed to do justice to the expression of human consciousness, past or present, are unlikely to be encapsulated in the rigid conceptual boxes of some purpose-built vocabulary'.¹⁵ While such expansive pronouncements encourage creativity, however, they are not always conducive to clarity; we build conceptual boxes for a reason. The topics and methodologies of the current study are drawn from a variety of historiographical realms and disciplinary contexts, such that the reader who opens this book with the expectation of 'intellectual history' in any of its current forms may feel, with justifiable frustration, that I am not engaged in doing it either. In order to

¹³ Above, I; 'thin veneer': Rostovtzeff 1926: 370.

¹⁴ Collini *et al.* 1985: 52.

¹⁵ Collini *et al.* 1985: 48.

avoid disappointment, therefore, it seems necessary to plant my flag at the outset and state explicitly what I mean by the term.

The intellectual history this book seeks to write is not a 'history of ideas', either in the more Platonist conception of that history as practised by Arthur Lovejoy and his successors, or in its contextualist twentieth-century incarnations, associated particularly with Pocock and Quentin Skinner, which sometimes prefer to call themselves 'intellectual history'.¹⁶ Its primary aim is not to trace the contours, development or contexts of any particular idea, concept or thought, or to recover the thought-world or scholarly practices of a particular individual, group or institution, although some of these enquiries will be undertaken along the way and form an integral part of the whole. Nor is it a history of intellectual contacts between Greece and Mesopotamia during the Hellenistic period, although it includes these components within it. Rather, it is a history of (selected strands of) Hellenistic intellectual culture and intellectual activity which aims to highlight cross-cultural connections, both direct and indirect.

The adjective 'intellectual' is understood here in a broad sense which is not limited to high-level or formalised scholarly enquiry, but potentially includes all forms of conceptual engagement with pre-existing traditions (written or oral) and the contemporary world. I use the terms 'intellectual activity' or 'intellectual production' to denote the creation, curation or study of all material which falls under this expansive definition. This includes the copying and composition of texts within formal traditions or institutional contexts which would usually come under the heading of 'scholarship', but also less formalised kinds of creative or reflective engagement with the world, which attest to the knowledge and perceptions of individuals and groups beyond specialist academic enquiry.

The material of analytical interest, therefore, includes writings produced within the formal scholarly contexts and traditions which are typically the preserve of intellectual history: astronomical and astrological texts; historiographical compositions in

¹⁶ History of ideas: see e.g. Lovejoy 1936; 1940; modern contextualist approaches: see e.g. Skinner 1969, and the essays collected in Pocock 1971; 2009.

Greek and Akkadian; treatises on the flora and fauna of the known world. But it also encompasses sources whose contents or contexts take us outside these domains: elementary school exercises in Akkadian and Sumerian; honorific inscriptions set up by Greek poleis; correspondence to and from the Hellenistic kings. In turn, the individuals under discussion include, but are not limited to, those associated with formal institutions of learning: we will encounter Aristotle and Theophrastus at the Lyceum in Athens, but also the priests of Athena in her sanctuary at Lindos on the island of Rhodes.

In a similar way, the treatment of the sources, the questions asked and the analytical techniques utilised draw upon, but are not restricted to, those typical of the history of ideas as practised by Lovejoy or Skinner and their followers. The early chapters trace the transmission of particular concepts across cultural boundaries at a level of abstraction which brings us close to Lovejoy. At times, close and contextualised exegesis of a source is undertaken with the aim of understanding precisely what a given individual or group was doing or saying, or trying to do or say. This is securely within the methodology of modern ‘intellectual history’, although it is to be noted that the potential ‘contexts’ here include not only the linguistic context prioritised by Skinner, but all the proximate circumstances of a source’s creation and subsequent interpretation or utilisation in antiquity – political, social, cultural and intellectual.¹⁷ Not all contexts will be relevant in every case, nor will they always be submitted to analytical scrutiny, but following Mark Bevir, I do not regard any single context as necessary or sufficient for understanding a given source, and so all must remain available for consideration.¹⁸

Elsewhere, it is not so much the argument or narrative of a particular composition or the aims or beliefs of its author(s) which will be of interest, but features which can be analysed as indices of *mentalités* or more far-reaching intellectual trends. That is to say, sometimes it is a case of using the text to get at the intellectual and cultural context, which is more or less the inverse of the interpretative paradigm often hailed as the distinctive

¹⁷ Skinner 1969. ¹⁸ Bevir 1992, esp. 94.

feature of intellectual history (especially vis-à-vis the history of ideas).¹⁹ Here the methods in play come closer to those characteristic of cultural historians, and indeed one could equally describe the overall enterprise as a cultural history which happens to focus mainly on knowledge and perceptions. I have, however, preferred the classification 'intellectual history', precisely to encourage reflection about what kinds of intellectual history it is possible for us to write about the Hellenistic world, and indeed about the ancient world more generally. I use 'intellectual culture' to refer to the forms of intellectual activity characteristic of a particular institution or social or cultural group, while 'intellectual life' functions as a descriptor to denote all intellectual activity in a given region.

One term that will rarely make an appearance is the noun 'intellectual'. While 'intellectual activity' or 'intellectual culture' can be defined flexibly without colliding with a particular modern concept, the narrower semantic field of the noun 'intellectual' in modern English means that its application to the ancient contexts under discussion carries a greater risk of anachronism and the creation of a falsely homogenising category. Although difficult to define precisely, 'intellectual' tends to denote an individual who has an unusual ability for and/or interest in academic pursuits, and expends a significant portion of their time on them, often for professional reasons.²⁰ Individuals who could fit these definitions existed in both ancient Greece and Mesopotamia: the scholars maintained at royal expense at the court of the Neo-Assyrian kings in the eighth and seventh centuries BC; wealthy Greek aristocrats like Plato who devoted themselves to philosophical

¹⁹ E.g. 'Intellectual history ... tends instead to regard ideas as historically conditioned features of the world which are best understood within some larger context' (Gordon 2012: 2); 'we need to focus not on texts or unit ideas, but rather on the entire social and political vocabularies of given historical periods. Beginning in this way, it is claimed, we may eventually be able to fit the major texts into their appropriate intellectual contexts ...' (Skinner in Collini *et al.* 1985).

²⁰ On the difficulties of definition, see for the ancient world Vatai 1984: 1–5 (who goes on to take a Weberian approach); more generally Collini 2006, especially Part I. As Collini observes, the tendentious nature of many modern definitions which seek to make a particular historical feature part of the concept of the 'intellectual' then makes it 'impossible to do justice to the sheer variousness of the ways in which the role of the intellectual can be performed' (2006: 64).

study; the literary and scientific specialists whose comfortable existence in Ptolemaic Alexandria, ‘wrangling ceaselessly in the birdcage of the Muses’ at royal expense, was lampooned by the Hellenistic poet and philosopher Timon of Phlius.²¹ Yet there are also many others whose activities fall within the scope of our enquiry, but who cannot be straightforwardly classed as ‘intellectuals’ because their primary profession has a practical or other dimension not covered by the modern senses of the term: doctors, for instance, or priests or engineers.

Even the use of the term to describe those who *do* fit the modern definitions is problematic. First, labelling these individuals ‘intellectuals’ risks obscuring important aspects of their lives and activities: many were involved more directly in political or religious life than the modern term ‘intellectual’ implies, and these roles often took precedence over their scholarly pursuits. Using ‘intellectual’ as a classifier also risks creating a misleading sense of homogeneity around what is in fact a very disparate set of individuals. Beyond basic similarities such as royal patronage or institutional support, there are significant differences between the social and intellectual frameworks within which these ‘intellectuals’ lived and worked, particularly across cultural boundaries. The experience of a Greek poet at the court of a tyrant was a long way from the institutionalised patronage enjoyed by the Hellenistic scholars of Alexandria or Pergamon, whose relationship with ruler and state was in turn (as we shall see in [Chapter 5](#)) very different from that of the court scholars who served the kings of Assyria.

A final reason for avoiding the noun ‘intellectual’ is that it cannot be mapped onto a distinct professional or conceptual category that would have been meaningful for most or all of the ancient actors discussed. The semantic fields of Greek *philosophos*, ‘lover of wisdom’, and Akkadian *ummānu*, ‘expert’, are wider than that of ‘intellectual’; the former can cover anything from members of the Academy to ‘wise’ individuals with no particular academic orientation, while the latter includes artisans as well as scholars. At the opposite end of the spectrum, other

²¹ Ath. 1.22d.

1.1 'Hellenistic Intellectual History'

Greek and Akkadian terms used to describe those whose activities and writings will fall within our remit are narrower in scope than 'intellectual', or have connotations not present in the English concept: Greek *grammatikos* and *philologos* tend to have a linguistic cast; Akkadian *tupšarru*, 'scribe/scholar', is tied to the creation and interpretation of written sources, while the professional titles held by Babylonians whom we might think of as 'scholars' usually have links to the religious sphere. Thus, 'intellectual' is not only potentially misleading in terms of classification but a hindrance when it comes to entering the thought-worlds we wish to explore. This book, then, sketches the contours of a 'Hellenistic intellectual history' with few intellectuals. The next step is to define the Hellenistic component.

1.1.2 Pinpointing the 'Hellenistic'

The question of what makes the Hellenistic world, Hellenistic period or Hellenistic history particularly 'Hellenistic' is a perennial one for historians who claim some unity for a heterogeneous and shifting geopolitical expanse between Iberia and India during the last few centuries BC.²² Definitions and characterisations evolve with each generation of scholarship. Gustav Droysen's 'Hellenismus' has long been criticised for its focus on the 'barbarian penumbra' rather than the Greeks themselves, its teleological framework and ideas about religious fusion.²³ Rostovtzeff's vision of the Hellenistic world as a single economic system and his emphasis on the *bourgeoisie* have also come under attack.²⁴ Some definitions have stressed the network of competing Macedonian dynasties and their courts as the factor which gives the Hellenistic world its coherence and distinctiveness, and if a single element is to be found to bind together the whole, this is perhaps the most persuasive.²⁵

²² This section engages very selectively with a vast literature; for further discussion and bibliography, particularly on issues of definition, see Walbank 1991; Cartledge 1997; Ogden 2002; Austin 2006: 1–4; Thonemann 2016 ch. 1.

²³ E.g. Walbank 1991: 98–9; Ogden 2002: ix–x; Green 2007: xvi; Errington 2008: 8. For more detailed studies of Droysen and 'Hellenismus', see Momigliano 1935; 1970a; 1970b, with bibliography.

²⁴ E.g. Momigliano 1943; 1954; Cartledge 1997: 11–13, with further references.

²⁵ Ogden 2002: x; Errington 2008: 8–9; Lane Fox 2011: 4.

On balance, however, a pluralistic approach to the unity and distinctiveness of the Hellenistic world seems more fruitful. In particular, Droysen's emphasis on the cultural should not be abandoned.²⁶ Modern experiences of decolonisation have rightfully left us mistrustful of theories of cultural fusion and provoked a reaction against the hegemonic or otherwise asymmetrical cultural relations implied by the original use of the term 'Hellenistic'.²⁷ So too, the fact that 'fusions' between Greek and Near Eastern culture took place long before Alexander undermines Droysen's definition.²⁸ And yet it remains undeniable that the adoption and adaptation of Greek cultural forms across and beyond the territories covered by the Hellenistic kingdoms is one of the defining characteristics of the period. The most heuristically powerful definitions are those which combine the political and cultural, such as that of Andrew Erskine and Lloyd Llewellyn-Jones, for whom it is 'the fragmented character of power in parallel with a coherence that comes from the acknowledgement of a common Graeco-Macedonian culture that helps to make the Hellenistic world distinctive'.²⁹

I use the word 'Hellenistic' in two different senses, which should be clearly distinguishable. The first is as a descriptive shorthand to refer to the history of areas under the control of the Graeco-Macedonian kingdoms in the period between the conquests of Alexander and the battle of Actium. For example, 'Hellenistic Greek poetry' refers to poetry written in Greek within these areas between 331 and 31 BC; 'Hellenistic Babylonia' denotes Babylonia during the reign of Alexander, the wars of the diadochi and the Seleucid period. Like all categorisations, these are to some degree problematic. Since the tides of art and literature rarely follow political events with chronometric precision, it is unsatisfactory to classify poetry around the surface ripples of *histoire événementielle*, while continuity from the Seleucid to the Parthian period in Babylonia in terms of both Greek and

²⁶ Erskine 2003a: 2–3.

²⁷ E.g. Préaux 1978; Bingen 1981 (published in English as Bingen 2007); Will 1985; see also Bagnall 1997 for a judicious reflection on the advantages and limitations of postcolonial approaches to the Hellenistic world.

²⁸ Lane Fox 2011: 2. ²⁹ Erskine and Llewellyn-Jones 2011: xvi.

Babylonian cultural forms provides an argument for including the latter under 'Hellenistic'. Yet the only cultural definition which encompasses all regions of the Hellenistic world involves the spread of Greek cultural practices, and as this study aims to develop a 'Hellenistic' intellectual history which is not tied to Greek culture, it seemed best to avoid definitions which stress proximity to the Hellenic. For conceptual clarity, therefore, I have preferred to use a simple political definition based on Macedonian dynastic control for the descriptor; furthermore, in practice the more rigid chronological boundaries that result from a politically based definition of 'Hellenistic' will be applied with some permeability.

On the descriptive definition above, 'Hellenistic intellectual culture' comprises all intellectual activities undertaken within the specified geographical and chronological limits, regardless of the degree to which such activities were interconnected, or mutually implicated in broader patterns or trends. But this book also aims to pin down a stronger definition of 'Hellenistic' which can bear significant analytical weight. This is the second sense in which I use the term, as the elusive and contested concept which proclaims a unity and distinctiveness for the new world order created by Alexander and his successors. I wish to pose the long-standing 'Hellenistic' question for the intellectual sphere: how far can we speak of aspects of intellectual life which are 'Hellenistic' not just because of their temporal or geographical contexts, but because they are in a meaningful sense characteristic of the period?

Here I also seek to shift the focus of existing debate. The historical phenomena typically posited as essentially 'Hellenistic' are Hellenic or Hellenocentric: the spread of Greek language and culture; the kings who, for all their engagement with their non-Greek subjects, were conscious and competitive philhellenes. This takes us back to Rostovtzeff's vision in which the socio-cultural unity of the Hellenistic world beyond Greece itself was limited to its 'Greek superstructure'.³⁰ In this study, the unifying factors sought go beyond Hellenism. While the first parts of the book consider

³⁰ Rostovtzeff 1941: 1053.

connections between Greek and Mesopotamian scholarship within the more Hellenocentric frameworks traditional in studies of Hellenistic intellectual life, the following chapters explore parallel features of Greek and Babylonian intellectual culture which are ‘Hellenistic’ in the strong sense without being Hellenocentric. By this, I mean features that arise from the defining political and cultural phenomena of the period, but are not limited to Hellenic or Hellenised groups or spheres of activity. For example, mythological kinship narratives spun by non-Greek communities seeking to insert themselves into the network of Hellenistic poleis are characteristic of the period and take us geographically beyond the old Greek world, but remain within a Hellenic frame of reference. On the other hand, similar shifts in the intellectual geographies of Greek and Babylonian scholars which arise not from Greek influence but as parallel responses to political changes transcend the Hellenic and are ‘Hellenistic’ in a more holistic sense. By identifying and studying these characteristically ‘Hellenistic’ features of intellectual life, we can begin to write intellectual history which is also ‘Hellenistic’ in the fullest sense.

1.2 The Test Case: Greece and Mesopotamia

The topic of connections between the Hellenistic Greek world and Mesopotamia is, of course, part of the larger subject of relations between the two cultural zones in antiquity. The history of interactions between the *Yawnāya* (‘Ionians’, as the Assyrians and Babylonians knew the Greeks) and the inhabitants of the ‘land between the rivers’ is long, but often cast into deep shadow due to the patchy and uneven nature of the source record. In the first millennium, it suffers particularly acutely from the loss of all written sources on papyrus and parchment from Mesopotamia, where these materials have not been preserved.

Until the later first millennium, the spotlight of the extant textual sources falls only fitfully on relations between the two regions, capturing sporadic moments of contact: the activity of ‘Ionian’ marauders in the Levant reported in a letter to the Assyrian king Tiglath-Pileser III (r. 744–727 BC); the mercenary career of Antimenidas, whose glorious service as a Babylonian

1.2 The Test Case: Greece and Mesopotamia

ally was purportedly recorded by his brother, the poet Alcaeus of Mytilene (ca. 620–580 BC).³¹ Yet these briefly illumined encounters took place against a background of continuous contact and exchange, direct and indirect. This can be traced primarily in the material record, particularly during the ‘Orientalising period’ of the eighth and seventh centuries where the appearance of Mesopotamian objects or motifs in the Greek world attests to trade connections and artistic influence: Assyrianising iconography on an eighth-century bronze tympanon from the Idaean cave on Crete; Mesopotamian bronze votives and cylinder seals in Greek temples on the mainland and the Aegean islands.³² Written sources afford subtler indices of cross-cultural connections in the form of motifs, concepts or words which, although by this time fully naturalised into their new context, appear to have been borrowed from one culture to the other. An obvious example here is the mina (Greek *mnea/mna*, Akkadian *manû*), a post-Mycenaean borrowing whose Mesopotamian origins are assured not only by its name but by the sexagesimal system of reckoning that came with it.³³

Since such borrowings provide some of the clearest evidence of cross-cultural connections, it is, naturally, within the framework of borrowing and influence that the intellectual histories of the Greek world and Mesopotamia tend to be linked. This involves an approach to cross-cultural influence already systematically applied by ancient writers: the identification of ideas or practices transmitted from one culture to another, and the establishment of the direction of transmission through relative chronology or other reasoning about the likely origin of the phenomenon under discussion. Already in the fifth century BC, Herodotus hypothesised that the Greeks learnt the names of

³¹ Raids by the *Yawnāya*: SAA 19, 25 (the earliest reference to ‘Ionians’ in Assyrian sources). Antimenidas: Strabo 13.2.3 (although see now Fantalkin and Lytle 2016 for a sceptical reconsideration of the evidence for Antimenidas’ Babylonian career, and Greek service in the Neo-Babylonian army more generally).

³² Burkert 1992: 15–17; Curtis 1994; Dalley and Reyes 1998: 98–9.

³³ Burkert 1992: 37. In expressions of mass and quantity, Akkadian units of measurement were used in the absolute (uninflected) form, which for *manû* is *manā*, hence the Greek forms ending in long alpha. For a range of other suggested loanwords from Akkadian, see West 1997: 12–14; Azize and Craigie 2002; Griffith and Marks 2011; Kroonen 2012. The borrowing of astronomical names and terms is discussed in Chapter 2.

nearly all the gods from Egypt, where they had been known ‘from the beginning of time’; four centuries later Diodorus Siculus posited an Egyptian background for Orphic rites on the grounds that the rituals for Hermes and Demeter shared similarities with those for Isis and Osiris.³⁴ As in these examples, it is Egypt that most frequently attracts this type of analysis from Greek and Roman authors, a reflection of both its greater proximity and the privileged position it held for Greeks as a land of great antiquity and a source of knowledge and customs. Yet Mesopotamia was also seen as a source of cultural and intellectual borrowing, particularly when it came to celestial matters: Aristotle credited the Babylonians and Egyptians as the source of much Greek knowledge about the stars and planets, while Diodorus claimed that the Chaldaeans (as the Greeks often referred to the Babylonians) ‘have the greatest grasp of astral learning (*astrologia*) of all men’.³⁵

Within modern scholarship, what we might call the ‘Herodotean’ approach – the identification and study of transmitted elements – remains popular. Moreover, since the decipherment of the cuneiform script in the mid-nineteenth century, direct access to the Akkadian and Sumerian sources from Mesopotamia has enabled modern scholars to advance far beyond the often vague and sometimes confused statements of Classical authors about the relationship between Greek and Mesopotamian conceptions and practices. The studies of Walter Burkert and Martin West are perhaps the best-known modern examples of the ‘Herodotean’ approach and set the tone for much recent scholarship in the area. Burkert’s groundbreaking *Orientalizing Revolution* assembled an exhilarating range of suggested borrowings from several Near Eastern cultures across all domains of Greek culture, from metalwork to medicine;³⁶ the latter topic has received further treatment by Geller and others, who have advanced various arguments for the interpenetration of Babylonian

³⁴ Hdt. 2.50; cf. 2.43–5 (Herakles borrowed from Egypt); 49–58 (Egyptian origin of Greek deities and divination); Diod. Sic. 1.96.4–5.

³⁵ Arist. *Cael.* 292a9; Diod. Sic. 2.31.8; cf. also Strabo 16.1.6; Cic. *Div.* 1.1.2. On the meaning of *astrologia* in antiquity and its relationship to *astronomia* see further pages 36–8.

³⁶ Burkert 1992; see also Burkert 2004.

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and Greek medical theory and practice.³⁷ In the literary sphere, West's *East Face of Helicon*, which aimed to demonstrate 'pervasive' Near Eastern influences on archaic Greek poetry, proposed many borrowings from Sumerian and Akkadian literary traditions, and continues to inspire similar efforts to uncover Near Eastern influence on Greek literature.³⁸ Christopher Metcalf's cautious and systematic study of Mesopotamian, Hittite and Greek hymns has revealed the case for some of these borrowings to be unsustainable and poses a challenge to West's overall thesis, but also marshals new evidence for influence from Mesopotamia on early Greek poetry.³⁹ Moving beyond literary borrowings, astronomy and astrology continue to be a fertile area for the study of Mesopotamian influence. Seminal work by Johannes Kugler, Franz Cumont, Auguste Bouché-Leclercq and Otto Neugebauer in particular sparked a steady and ongoing stream of scholarship which has gradually brought into relief the borrowings from Babylonian to Greek celestial scholarship.⁴⁰ Babylonian influence on Greek mathematics has also been posited, although the case is at present less compelling than with astronomy and astrology.⁴¹ Across all disciplines, evidence for reciprocal Greek influence is so far minimal, but ongoing research may alter the picture.⁴²

The 'Herodotean' approach is self-evidently an important analytical tool for cross-cultural intellectual historiography. However, it has its limitations, which in the case of Hellenistic Greece and Mesopotamia are exacerbated by the state of the surviving sources. On the one hand, there is the problem of the illusory parallel: if an apparent borrowing is very specific or complex and there is a clear difference in relative chronology between its attestation in each cultural tradition, independent development can be ruled out, but the case for influence is often much more equivocal. Further, even

³⁷ Geller 2001; Stol 2004; Van der Eijk 2004; Demont 2009. Part of the remit of the BabMed project in Berlin (www.geschkult.fu-berlin.de/en/e/babmed/) is to examine knowledge transfer from Mesopotamian to Aramaic, Greek and Egyptian medical traditions.

³⁸ West 1997; more recently López-Ruiz 2010 (cosmogonies); Bachvarova 2016 (Anatolian and Greek epic, but cf. the critical review by Metcalf 2017).

³⁹ Metcalf 2015. ⁴⁰ See further Chapter 2.

⁴¹ Friberg 2007, but cf. the review in Sidoli 2008 and the alternative argument for independent development advanced by Robson 2008b: 274–88.

⁴² One possible exception is astronomy: see Steele 2006, and pages 88–9.

definite instances of borrowing frequently yield few insights about the contexts and mechanisms of intellectual exchange. Borrowed elements often first appear in sources which are temporally and spatially removed from the original point(s) of transmission and which yield no information about how this transmission occurred. Neugebauer's comments on astronomy are also valid for other areas of knowledge: 'The mere fact itself of Babylonian influences on hellenistic astronomy is obvious ... It is much more difficult, however, to determine with reasonable accuracy the time of transmission or the mode of contact'.⁴³ For some areas, such as medicine, there is the added impediment that synthetic or synoptic work on the Mesopotamian sources is still at a relatively early stage, making it more difficult to evaluate potential borrowings.⁴⁴ In terms of connecting Greek and Babylonian intellectual life during the Hellenistic period, the Herodotean approach can take us only so far. Tending as it does to a decontextualised history of ideas, it rarely enables us to link contemporary Hellenistic sources or individuals, or construct a narrative about broader intellectual networks or trends in the Hellenistic world. As a result, only in a partial sense does it generate the kind of Hellenistic intellectual history envisaged above.

An alternative means of linking Greek and Babylonian intellectual histories is the purely comparative approach. This too has its ancient adherents. In a well-known passage, Diodorus draws a strong contrast between the 'Chaldaeans' (Babylonians) and the Greeks through a comparison of their educational and scholarly practices:

The training which they (the Babylonians) undertake in all these subjects is not the same as that of the Greeks who pursue such studies. For among the Chaldaeans, the higher study (*philosophia*) of these subjects is handed down within the family, and son takes it over from father, being exempt from all other public duties ... Since they are brought up studying these disciplines from

⁴³ Neugebauer 1975: 589.

⁴⁴ See the surveys of this productive but not always methodologically rigorous subfield in Robson 2008a; Geller 2009; Geller 2010 offers the first overview of Mesopotamian medicine, drawing on previously unpublished cuneiform sources. Lorenzo Verderame maintains an online bibliography of Ancient Mesopotamian Medicine (published in print form in *JMC* 2012) at <http://lorenzoverderame.site.uniroma1.it/materiali/bibliography-of-ancient-mesopotamian-medicine>.

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childhood, they acquire great skill in them, both because of how easy it is to teach the young and because of the great amount of time devoted to the process.

Among the Greeks, on the other hand, the man who applies himself to many subjects without preparation reaches higher study (*philosophia*) late, and then after labouring at it for a little while he abandons it, distracted by the need to make a living. Only a few really dive in to higher study and continue to train – in pursuit of profit, always trying to make changes concerning the most important doctrines and not following those who came before them. Accordingly the barbarians, because they always stick to the same subjects, grasp each detail securely, whereas the Greeks, who are aiming at the profit to be made from the business, are perpetually founding new schools and, since they disagree with each other about the most important theories, they cause their pupils to hold conflicting views and their minds to wander in confusion, remaining all their lives in a state of flux and unable to believe anything with complete conviction.⁴⁵

Elsewhere Diodorus, like Herodotus, is a keen adherent of the search for cross-cultural borrowings. Here, however, he is interested not in identifying similarities between the *contents* of Greek and Babylonian *philosophia*, but in explaining what he sees as a marked difference in the relative level of expertise typically achieved by students in each culture. As such, the comparison he undertakes is structural, setting against each other the intellectual and social frameworks of Babylonian and Greek *philosophia*. In the end, he decides, it is the combination of economic freedom, long training, and familial input which gives the Chaldaeans the edge over the flighty and profit-hungry Greeks. Whatever the validity of the conclusion, this moment of richly contextualised comparativism is a salutary reminder that socially and culturally grounded intellectual history is not an invention of the twentieth century AD.

Among modern exponents of the comparative approach, the work of Geoffrey Lloyd, who uses comparison to highlight difference as much as similarity, has become emblematic with regard to the study of the Classical world, Mesopotamia and China.⁴⁶ More recently, Johannes Haubold has also applied a broad comparative methodology to Greek and Mesopotamian literatures.⁴⁷ Seeking to transcend the often unanswerable questions which arise from the search for

⁴⁵ Diod. Sic. 2.29.3–6.

⁴⁶ E.g. Lloyd 1996; Lloyd 2002; Lloyd 2006, Part III; Lloyd and Sivin 2002.

⁴⁷ Haubold 2013d.

parallels and borrowings, Haubold highlights more overarching similarities between the literatures of Greece and Mesopotamia, such as a concern with mortality or a belief in a well-ordered divine universe, exploring how these similarities later helped to establish a cultural dialogue.

This book represents a combination of the approaches used by Herodotus and Diodorus in these passages – and those of their modern counterparts. The first part ([Chapters 2–3](#)) takes up the ‘Herodotean’ study of cross-cultural borrowings to re-evaluate three important but problematic points of contact between Hellenistic Greek and Babylonian intellectual culture. The remainder of the book moves towards the structural comparativism used by Diodorus in his discussion of the Chaldaeans. The second part of the book ([Chapters 4–5](#)) applies socially and politically contextualised comparison in the vein of Lloyd, to uncover significant differences in intellectual praxis which call into question the validity of some proposed connections between Greek and Mesopotamian intellectual culture. In the final part of the book ([Chapters 6–7](#)), I use this structural comparativism in a different way from Diodorus, Lloyd or Haubold, as a tool to draw indirect but specific connections between Greek and Babylonian scholars of the Hellenistic period and their activity. Here, comparison is not just a ‘way out of parochialism’, as Lloyd and Sivin put it, but a key to cross-cultural connection where evidence for direct contact is lacking.⁴⁸

From a wider historiographical perspective, linking Hellenistic Greek and Babylonian intellectual activity not only via direct contact and influence but also through the prism of broader structures and trends affords a new paradigm for Hellenistic intellectual history. At the most overarching level, it contributes a cross-cultural dimension to the ongoing project of charting the distinctive and unifying characteristics of the Hellenistic world as a whole.

1.3 Sources and Scope

Although they represent only a fraction of the sprawling, polyglot behemoth that constitutes the potential building blocks for the

⁴⁸ Lloyd and Sivin [2002](#): 8.

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writing of Hellenistic history, the sources, contexts and individuals mentioned in this book are disparate and wide-ranging. The path we will chart through the social and intellectual worlds of Hellenistic Greek and Babylonian scholars will take us from the timber forests of Macedon to the mangrove swamps of the Persian Gulf (Figure 1.1), and from cardinal points of western historical consciousness – the Library of Alexandria; the Hanging Gardens of Babylon; the Septuagint – to forgotten scholars, out of the way places, and topics of specialist interest: Anu-aḥa-ušabši of Uruk, the mountains of Arcadia, Babylonian lunar theory. As a further aid to navigation, therefore, an introductory sketch of the principal sources, places and protagonists is given here.

For the period which is the main focus of this book, ‘Mesopotamia’ and ‘Mesopotamian’ in practice refer primarily to Babylonia, the southern half of the swathe of land carved out of the Eurasian landmass by the Tigris and Euphrates rivers on their journeys from the Taurus mountains to the Persian Gulf. After the fall of the Neo-Assyrian empire in 612 BC, textual documentation from Assyria, the northern half of Mesopotamia, is slim to non-existent; for the remainder of the first millennium the historical spotlight shifts to Babylonia, which, after a brief period as an independent power during the Neo-Babylonian period (612–539 BC), came under the control of a succession of external rulers: the Persians (539–331 BC), Alexander and the diadochs (331–312 BC), the Seleucids (312–141 BC) and finally the Parthians (141 BC–AD 224). These successive phases of foreign rule, which mark the final centuries of cuneiform writing in the region, are often referred to collectively by Assyriologists as the Late Babylonian period. The main spoken language of the region in the later first millennium was Aramaic, joined increasingly in the Hellenistic period by Greek. No doubt a huge body of literary and documentary sources in both languages once existed, but climatic conditions in Mesopotamia have not favoured the survival of the parchment and papyri on which they were written. The occasional ostrakon, inscribed seal or stone or brick inscription in Aramaic or Greek is a tantalising and frustrating reminder of this vanished record. All this evidence is therefore lost, with crippling consequences for our understanding of the region’s

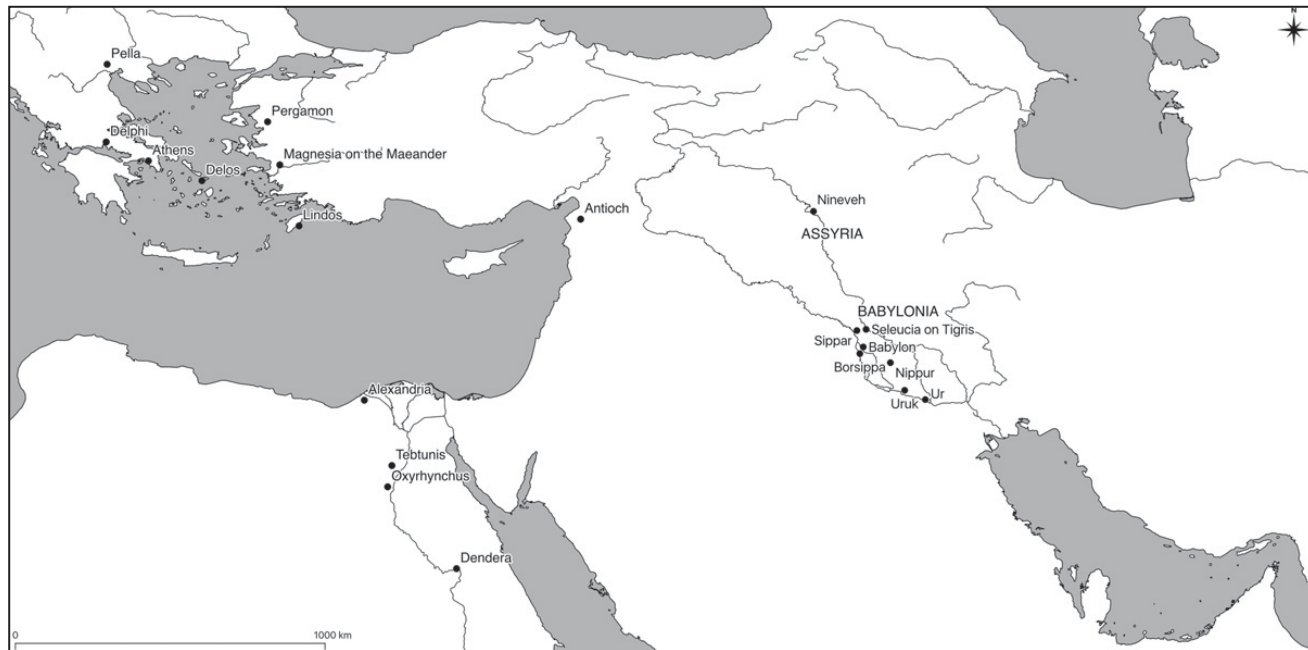


Figure 1.1 Map of key sites discussed

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history, in particular when it comes to cultural identity and cross-cultural interaction; the plurality of views in modern scholarship on the degree of ‘Hellenisation’ in Hellenistic Babylonia and the extent to which Greeks and Babylonians interacted at all are testament to the ambiguity of the evidence.⁴⁹

What *have* been preserved in significant numbers are clay tablets, inscribed in cuneiform script with texts in Sumerian and Akkadian. By the Hellenistic period, these languages increasingly survived only in the domains of liturgy and scholarship associated with the traditional Mesopotamian temples. Once the *lingua franca* of the entire Near East, Akkadian was now known only to a small group of temple elites, who continued to care for the gods in the time-honoured manner, and to study the core texts of an already ancient scholarly tradition. It is the writings of these individuals which, together with the fragments of Berossus’ *Babyloniaca* and scattered comments in the works of Greek and Roman writers, constitute our evidence for Mesopotamian intellectual culture in the Hellenistic period.

It is still justifiable in this period to speak of ‘Mesopotamian’ rather than simply ‘Babylonian’ scholarship, since at least some of the surviving sources reflect both Babylonian and Assyrian traditions.⁵⁰ However, all the sources for cuneiform scholarship in the late first millennium come from Babylonia. We will therefore be overwhelmingly concerned with the cities of southern Mesopotamia, which have yielded the bulk of the cuneiform

⁴⁹ The prevailing tendency in scholarship has been to regard the level of Hellenisation (however defined) in Hellenistic Babylonia as minimal (thus e.g. Van der Spek 1987; Oelsner 2002a; Van der Spek 2005), although a few scholars have suggested that the evidence both for Seleucid promotion of Greek political and cultural institutions in non-Greek contexts, and Babylonian engagement with Greek culture before and during the Hellenistic period should be given greater weight (e.g. Kuhrt 1987: 50–1; Sherwin-White 1987: 30–1). Oelsner 2002a distinguishes helpfully between ‘Hellenization in Babylonia and Hellenization of the Babylonian culture’ and offers a useful survey of the evidence for Greek influence in different areas of life (183). Philippe Clancier and Julien Monerie have argued in a series of studies for increasing Seleucid interference in and control of temple administration and finances, and promotion of Greek political and cultural institutions in Babylonia, particularly under Antiochus III and IV (Monerie 2012; Clancier 2012; Clancier and Monerie 2015; Clancier 2017; Monerie 2017a).

⁵⁰ On Assyrian traditions in Late Babylonian religion and scholarship, see Beaulieu 1997; Beaulieu 2010.

tablets from the Hellenistic period.⁵¹ The first is Babylon, the former capital and still an important political centre under the Seleucids. Thousands of literary and scholarly tablets recovered from the area around the city's main temple, the Esagila, attest to the flourishing of cuneiform scholarship among the temple elite during the Seleucid period, while a large number of administrative and legal documents inform us about the organisation and economic life of the temples. Just over ten miles southwest of Babylon and always closely linked to its more powerful neighbour, the city of Borsippa, noted by Strabo for its unusually large bats, which the inhabitants salted and ate, will be of interest for Seleucid investment in its main temple, Ezida.⁵² Deep in the walls of the temple, whose vitrified ziggurat dominates the plain for miles around and was long thought to be the Tower of Babel, excavators discovered a cuneiform royal inscription in the name of the Seleucid king Antiochus I, which affords crucial insight into relations between the Macedonian kings and the priestly elites of Babylonia.

In the south of Babylonia, our main focus will be on Uruk, one of Mesopotamia's oldest cities, located on the lower Euphrates some hundred miles south east of Babylon. Here, as well as legal and administrative texts, several hundred scholarly cuneiform tablets belonging to a close-knit group of elite local families enable us to build up an unusually rich and complex picture of the intellectual life of a single centre. A handful of tablets also survive from the cities of Kutha, Kish, Nippur, Larsa, Ur and Marad, but they are mostly from the period of the diadochs and will not concern us here.⁵³ Moving north again, the new Seleucid foundation of Seleucia on the Tigris, frequently mentioned in the sources from Babylon, will also feature. The Seleucids' royal city itself has yielded few cuneiform sources, but tens of thousands of clay sealings from long-decayed parchment documents,

⁵¹ On the cuneiform sources from Hellenistic Babylonia, see Oelsner 1978; Oelsner 1986; Pedersén 1998; Oelsner 2003; for Babylon, Boiy 2004: 13–39; Pedersén 2005: 109–296; on the period of the diadochi Boiy 2013; with a particular focus on literary and scholarly texts, Clancier 2009b: 28–44 (Uruk) and 123–169 (Babylon), with tablet lists in the Annexes; focusing on documentary and economic sources, Corò 2005 (Uruk); Monerie 2017b: 38–62; Pirngruber 2017: 3–22 (general).

⁵² Strabo 16.1.7. ⁵³ Boiy 2013: 10 and n.14.

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a tantalising reminder of what has been lost.⁵⁴ Further north still, we will visit Assyria, but before the fall of its empire, jumping back in time to the seventh century BC. The focus here will be on Nineveh, the Neo-Assyrian royal metropolis, whose palaces from their high plateau overlooked the confluence of the Tigris and Khosr rivers and the meeting of trade routes from east and west.

In all this, the partial nature of our textual record must always be remembered. We cannot fill the void left by the loss of the Aramaic and Greek sources from Mesopotamia. But we can be mindful of the fact that the ‘Mesopotamian’ or ‘Babylonian’ intellectual culture we can reconstruct is but one part of a much more vibrant and multidimensional intellectual and cultural world whose totality remains, perhaps forever, beyond our reach.

For the Greek world the principal difficulty presented by the sources is the opposite: their superabundance. In addition to the literary, historical and scientific texts that have reached us through the manuscript tradition, there is an extremely rich primary source record: thousands of papyri from Egypt; even more Greek inscriptions from the dizzying numbers of poleis and smaller Greek communities scattered across the Mediterranean and Near East. It is thus inevitable that the current study traces an extremely partial path through our surviving evidence for Greek intellectual culture in the Hellenistic world.

Obvious focal points are the four Hellenistic royal capitals: Alexandria, the first of Alexander’s cities, from where the waterborne power of the Ptolemies was carried north across the Mediterranean and south along the arteries of the Nile; Pergamon, where high above the Caicus valley the latecomer

⁵⁴ On the cuneiform finds from Seleucia, see Oelsner 1986: 236–7, who mentions thirteen tablets and two inscriptions. The tablets remain unpublished except for one, discovered on the surface near the Archive Building and published by Doty 1978–9, which records the dedication of one or more slaves to the god Nergal in SE 87 (225–224 BC; only the year is preserved), and may therefore have originally come from Kutha, Nergal’s main cult centre. The 49 cuneiform inscriptions discovered by the Turin Expedition (of which the majority are stamped bricks from the reign of Nebuchadnezzar II, apparently reused from other structures or sites) were published by Pettinato 1970, to which should be added the inscribed door socket, basalt slab and additional stamped brick discovered by the earlier American Expedition and mentioned briefly in Waterman 1931: 6; Waterman 1933: 78.

dynasty of the Attalids immortalised their ultra-Hellenic aspirations in architecture and sculpture; Antioch, the Seleucid capital in Syria, with its citadel on an island in the middle of the river Orontes; and the Antigonid seat at Pella, tucked away on an inlet behind the three-clawed Chalkidike peninsula with ready access to the Thermaic Gulf. The patronage extended by the kings to poets, philosophers, mathematicians, doctors and other specialists ensured that the royal cities were important centres of intellectual activity. We will delve in some depth into the complex source tradition concerning the many figures said to have attracted, enjoyed or indeed refused royal patronage. A wide range of material will come under consideration here, from the prefaces to Hellenistic technical treatises, to Diogenes Laertius' *Lives of the Philosophers*, to the biographical summaries of the Byzantine encyclopaedia, the Suda. Another important centre for Greek intellectual culture is of course Athens, which despite its loss of political independence remained a cultural reference point during the Hellenistic period. The cultural capital of old Greece will enter our focus as the home of various figures who were lured to the various Hellenistic courts, as well as through the works of Aristotle and Theophrastus, whose biological and botanical treatises will be examined for the insight they provide into intellectual geographies of the period.

Beyond the major centres, the places and sources which will be of interest fan out across and away from the Mediterranean. We will visit many Greek poleis, large and small, exploring local intellectual life through the epigraphic record and surviving writings by poets and historians. Delos, Delphi and the Rhodian city of Lindos will be significant stops along the way. Tracing the transmission of astronomical and astrological knowledge will take us deep into Egypt: far beyond the Ptolemaic capital perched on the Mediterranean coast to Oxyrhynchus in Middle Egypt, whose ancient rubbish dumps preserved vast numbers of papyri which shed sudden and blinding light on cultural and intellectual life in the late Hellenistic and Roman periods; further south still to Dendera, where the intermingled Egyptian deities and Babylonian zodiac

symbols circling the *pronaos* ceiling in the temple of the Egyptian goddess Hathor offer an arresting visual tableau of cross-cultural connections. The geographical extremes of our enquiry will be the banks of the Indus in the east, and the Pillars of Herakles in the west. A Glossary of selected places, deities and technical terms can be found at the end of the book.

This study falls into three parts. The first ([Chapters 2 and 3](#)) follows the more traditional approach to cross-cultural historiography, revisiting three well-known points of direct contact between Hellenistic Greek and Mesopotamian intellectual traditions. We will explore the nature of these contacts and the insights they afford into cross-cultural connections and internal developments, but also the difficulties they pose for the writing of synthetic intellectual histories. The first point of contact is celestial scholarship. Surveying a range of evidence from Babylonia, Egypt and the Greek world, [Chapter 2](#) highlights the depth and complexity of Greek borrowings from Babylonian astronomy and astrology, but also the limitations of our knowledge about agents and modes of transmission.

[Chapter 3](#) takes up the latter problem, exploring the interplay of Babylonian and Greek traditions in the work of one individual who sought to combine them, and an educational practice which may have facilitated cross-cultural exchange between Greek and Babylonian scholars. It begins with Berossus, a potentially paradigmatic figure for cross-cultural engagement, probing the extent of his knowledge of Greek and cuneiform scholarship and asking whether he should be viewed as typical or exceptional among the Babylonian elite of his time. This question leads to consideration of the pathways by which Babylonian elites might come to engage with Greek language and culture, and in particular to the enigmatic ‘Graeco-Babyloniaca’: clay tablets with Sumerian and Akkadian school texts written in cuneiform on one side and transcribed in the Greek alphabet on the other. We will take up the long-standing questions of whether their writers were Greek or Babylonian, and what we can extrapolate from these texts about linguistic and cultural bilingualism in Hellenistic Babylonia. Overall, the first part of the book highlights both the importance and the limitations

of the contact/influence approach for Hellenistic intellectual history. The cases examined are eloquent witnesses to particular connections between Babylonian and Greek scholarship during the period, but are of limited utility when it comes to understanding broader intellectual trends or patterns of cross-cultural contact. Specialised and isolated as they are, these points of contact are indispensable case studies, but offer us little guidance in the construction of larger narratives about intellectual life in the Hellenistic world.

In pursuit of these larger narratives, the second part of the book switches to a broader comparative approach. [Chapters 4](#) and [5](#) move gradually away from the search for contact and influence, but remain within traditional Hellenocentric territory, re-examining the case for linking Greek and Mesopotamian intellectual culture through one of the major catalysts for intellectual activity during the Hellenistic period: royal patronage. [Chapter 4](#) looks at the evidence for Hellenistic royal libraries as significant nodes of cross-cultural contact. It offers a challenge to theories which posit the Library of Alexandria and its analogues as beneficiaries of Mesopotamian intellectual culture, either because they were key sites for the collection and dissemination of Mesopotamian scholarship, or because the idea of a great royal library itself was a borrowing from Mesopotamia. [Chapter 5](#) moves from institutional to personal patronage, comparing the ways in which Hellenistic kings interacted with Greek and Mesopotamian intellectual culture. Although it argues that the Greek-dominated world of Hellenistic court scholarship was not one in which significant cross-cultural exchange took place, it contends that Greek and Babylonian intellectual practitioners fulfilled parallel functions for Hellenistic rulers, who utilised their expertise to cast themselves in locally appropriate roles across culturally heterogeneous territories.

The third part of the book ([Chapters 6](#) and [7](#)) takes the idea of the structural parallel further, moving beyond traditional historiographical paradigms to offer a new approach to cross-cultural connections. Hellenistic Greece and Babylonia are linked here not through direct contact or influence, but through structural

1.3 Sources and Scope

similarities between aspects of intellectual culture in both regions which can be analysed as characteristically ‘Hellenistic’. Both chapters examine the ways in which Greek and Babylonian writers engaged with the wider world and articulated their place within it, first across space and then through time. [Chapter 6](#) studies the Hellenistic world as reflected in the geographical repertoires of Greek and cuneiform texts from the period. Here there is little evidence for cross-cultural contact (with two important exceptions), but the intellectual geographies of Greek and Babylonian scholars can be aligned in a more structural sense. A comparative study of the usage of place names in Greek and Akkadian texts from the early Hellenistic period reveals symmetrical shifts in intellectual geographies, which can be seen as parallel responses to the contemporary rewriting of political geography. These changes provide an example of intellectual phenomena which are ‘Hellenistic’ in the strong sense: they are visible across the Hellenistic world, transcending regional and cultural boundaries, and can be causally linked to the defining political and social conditions of the period.

[Chapter 7](#) moves from the global to the local, and from space to time, turning the historiographical spotlight on individuals and communities outside the great centres of Hellenic learning at Alexandria and Pergamon. After highlighting the similarities in the careers, social contexts and intellectual concerns of local scholars in the Greek world and Babylonia, it argues that these individuals used constructions of the past in similar ways to negotiate their identity and status in the new world created by Alexander and his successors. Thus, the type of local historiography which has been shown to be a key means of self-assertion for Hellenistic poleis should be viewed not only as a Greek phenomenon but also as a feature of Hellenistic intellectual life which reflects the impact of parallel socio-political conditions in different cultural contexts. This chapter also underlines two central premises of the book as a whole: first, that properly contextualised comparison is important for assessing cross-cultural connections, and second, that if we wish to write intellectual histories of the Hellenistic world which venture beyond Alexandria, Pergamon and Athens, there is much

to be gained from casting the historiographical net widely and integrating Greek and non-Greek sources. Together with [Chapter 6](#), this final study constitutes an argument and test case for the writing of such histories, which not only in their geographical and chronological contours, but also in the unity and interconnectedness of their subject matter, can be said to be truly ‘Hellenistic’.

THE STUDY OF THE HEAVENS

The astral sciences spread from one civilization to another like a highly infectious disease.¹

We begin by following in the footsteps of Herodotus. Any intellectual history with a cross-cultural dimension must examine cross-cultural exchange; taking methodological inspiration from Herodotus' tracing of borrowings between Asia and the Greek world, therefore, we focus first on cases of influence and knowledge transfer. This and the following chapter re-examine three points of contact between Hellenistic Babylonian and Greek intellectual culture: celestial scholarship, Berossus' *Babyloniaca*, and the Graeco-Babyloniaca tablets from Babylon. These are not the only cases where contact could be fruitfully investigated; they feature here because, in accordance with our expansive definition of 'intellectual culture', they exemplify cross-cultural exchange at different educational levels, in different contexts and across different domains of knowledge. Indeed, in the coming pages we will move from some of the most complex mathematics in the ancient world to simple school exercises. More importantly, between them these three case studies highlight both the value and the limitations of the contact/influence paradigm for the writing of Hellenistic intellectual history.

The current chapter focuses on the area where contact between Mesopotamian and Greek intellectual culture arguably had the most significant impact: the study of the heavens. The Greek debt to Mesopotamia in this field was already acknowledged in antiquity. Aristotle in *De Caelo* refers to information about planetary movements from 'the Egyptians and

¹ Pingree 1992: 556.

Babylonians, who have made observations for very many years and from whom we have many reliable pieces of information (*pisteis*) about each of the stars’, and from the fourth century BC onwards Greek and Latin authors regularly emphasised the pre-eminence of the Babylonians, or ‘Chaldaeans’, in celestial matters, crediting them with various reports, calculations and techniques.² Aristotle stresses the length of time for which the Egyptians and Babylonians have been observing, and the temporal depth of the Babylonian observational record becomes a recurring theme in Classical sources, sometimes reaching fantastic figures: a sceptical Diodorus relays the ‘Chaldaeans’ claim that their observations stretched back 473,000 years before Alexander’s conquest; Pliny, citing Epigenes of Byzantium, locates their starting point 720,000 years before his own time.³ Even without exaggeration, the fact that the Babylonians’ observational data spanned many centuries must have been striking to the Greeks, since early Greek celestial enquiry was primarily cosmological and seems to have lacked a tradition of systematic observation.⁴

The Chaldaeans’ main claim to fame, however, derived not from their past observations but from their astrological forecasts for the future. This reputation was already secure by the early Hellenistic period, if we can trust a report by the Neoplatonist philosopher Proclus that Theophrastus admired their ability to predict not just ‘general’ or ‘shared’ phenomena (*ta koina*) like weather but also the fates of individuals.⁵ Despite his own scepticism, Cicero acknowledged their continued repute in his time: ‘the Chaldaeans ... through long observation of the stars, are thought to have perfected an art by which it is possible to foretell what will happen to any man

² Arist. *Cael.* 292a7–9; cf. *Mete.* 343b28–30 (Egyptians credited). For a summary of Classical authors who mention Chaldaeans and what was attributed to them, see Rochberg 2008: 15–19.

³ Diod. Sic. 2.31.9; Plin. *HN* 7.193. See Rochberg 2010b: 6–7 for other examples of the trope. On Epigenes (ca. third to second century BC), see Hübner 2006.

⁴ This reconstruction of early Greek astronomy was advanced by Dicks 1970, but has been developed most fully in a series of articles by Goldstein and Bowen, who also suggest that the beginning of systematic Greek observational astronomy was inspired by Babylonian practice. See Goldstein and Bowen 1983; Bowen and Goldstein 1988; Goldstein and Bowen 1989; Goldstein and Bowen 1991.

⁵ Procl. *In Ti.* 3.151.2–9 (= Theophr. Fr 194 *FHSG*).

and for what fate he was born.⁶ So strong was the association with celestial prognostication that the Greek Χαλδαῖος (Lat. *Chaldaeus*) came to be used to mean ‘astrologer’ regardless of ethnic or cultural affiliation.⁷

Much of what ancient authors attribute to the ‘Chaldaeans’ is vague or inaccurate, often containing a mixture of Greek, Mesopotamian and Egyptian elements. It has taken the gradual publication and analysis of Greek, Egyptian and Mesopotamian texts during the nineteenth and twentieth centuries to reveal the precise details of the borrowings and divergences.⁸ The picture is still changing, but it is clear that in the later first millennium BC various elements of Mesopotamian celestial scholarship came to be used and adapted in the Greek-speaking world. Access to Babylonian observational data and mathematical models facilitated the development of Greek astronomy into a quantitative discipline, while Graeco-Roman astrology drew upon and modified methods from Mesopotamian celestial divination. These borrowings were only part of a complex intertwining of the astral sciences of different cultures across a huge geographical area during this period: Babylonian astronomical and astrological concepts appear in Syrian, Egyptian and Indian texts, while Hellenistic Greek astrology itself combined Babylonian, Egyptian and Greek elements. A full history of Hellenistic celestial scholarship would need to take into account these additional cross-cultural connections, a project which is beyond the scope of the current chapter. But this broader cultural background makes celestial scholarship a particularly fruitful starting point for Hellenistic intellectual history which is cross-cultural in scope, since the Babylonian–Greek transmission is part of a wider pattern extending across (and beyond) the Hellenistic world.

After a brief review of pre-Hellenistic contacts, we will explore the observational data, predictive methods and interpretative paradigms from Babylonia that came to be integrated into Hellenistic

⁶ Cic. *Div.* 1.1.2.

⁷ Cumont 1912: 16; Greenbaum 2013. Rochberg-Halton 1984: 115 suggests that the association with astrology is a Hellenistic development; De Kuiper 1993 cautions that the semantic field of Χαλδαῖος/*Chaldaeus* is varied with no clear historical evolution.

⁸ On the decipherment and modern historiography of Mesopotamian celestial scholarship, see Neugebauer 1975: 347–51; Rochberg 2004: 14–43; de Jong 2016; Rochberg 2016; Ossendrijver 2016a; Steele 2016c.

Greek celestial scholarship, and consider the question of reciprocal influence. One Babylonian whose celestial expertise was celebrated by Graeco-Roman authors, Berossus, will not be mentioned here; his relationship to Babylonian and Greek astronomy and astrology is assessed in [Chapter 3](#). The particular cases of transmission discussed have been treated more fully in the specialist studies cited; readers wishing for more detailed understanding of particular concepts or methods are urged to consult these. My aim here is twofold: first, to provide a holistic overview of these contacts and borrowings which foregrounds questions of contexts and modes of transmission, and, second, to situate celestial scholarship within broader Hellenistic intellectual history. Guidance on technical terms and symbols can be found in the Glossary.

2.1 A Note on Terminology: Astronomy, Astrology, Transmission

A preliminary word is needed on terminology and categorisation. The clear-cut modern distinction between ‘astronomy’ – an empirical science which aims to understand the physical properties of the universe based on observation and deduction – and ‘astrology’ – the practice of predicting terrestrial events from celestial phenomena based on the belief that the latter signal or influence the former – is not paralleled in either of the cultural contexts we are examining. In Mesopotamia there was no linguistic or conceptual distinction between what we understand as ‘astronomy’ and ‘astrology’. Specialists in all types of celestial scholarship bore the title ‘scribe of *Enūma Anu Enlil*’ (‘When Anu and Enlil’ – a large series of celestial omens in Akkadian whose title is taken from the incipit of the text), and the same individuals are frequently found producing both ‘astronomical’ and ‘astrological’ material.⁹ For example, the cuneiform tablets copied by Anu-aba-utēr, a Babylonian ‘scribe of *Enūma Anu Enlil*’ active in second-century Uruk, include tables with mathematical calculations relating to lunar and planetary movements, but also

⁹ On the interrelationship of ‘astronomy’ and ‘astrology’ in Mesopotamia and the activities of the *ṭupšar Enūma Anu Enlil*, see Parpola 1993a; Rochberg 1993: 37–45; Rochberg 2000; Jones 2015b: 175–6, 182–91.

2.1 Terminology

a text which links different degrees of the zodiac with various *materia magica*, rituals and omens.¹⁰ In the Graeco-Roman world the terms *astronomia* and *astrologia* were utilised interchangeably to refer to what we would define as ‘astronomy’ and ‘astrology’ (with different writers making different distinctions), and the same individuals might combine activities that we would split into ‘astronomical’ and ‘astrological’.¹¹ Perhaps the best example is the Greek scholar Claudius Ptolemy, active at Alexandria during the second century AD. Ptolemy wrote the *Almagest* (Greek: *Mathematike Syntaxis*), a treatise containing mathematical models for predicting the movements of the Sun, Moon and planets which became a foundational text for later western astronomy. But he also authored the *Tetrabiblos*, a four-book work on the conceptual underpinnings and methods of astrological prediction. In the introduction to the latter work he describes both types of prediction as part of *astronomia*, and offers a defence of celestial prognostication as more fallible yet no less possible or useful than the mathematical prediction of the movements of celestial bodies.¹²

In keeping with this overlap in disciplinary categorisation and practitioners, techniques and practices that we might class as ‘astronomical’ were frequently used for ‘astrological’ purposes in both Mesopotamia and the Graeco-Roman world. In seventh-century Assyria, court scholars observed the movements of celestial phenomena for their ominous qualities; the order in which the planets are listed in astronomical cuneiform tablets from Seleucid Babylonia reflects their benefic or malefic influence upon life on Earth rather than their relative positions in space, and as we will see later, mathematical methods for predicting the motion of the planets were used to calculate the position of the celestial bodies in

¹⁰ Mathematical astronomical texts: *ACT* 102 (restored), 135, 163, 165, 171, 192, 400, 600, 601, 640; A 3405 (published in Hunger 2001: 310–17 (no. 74); cf. Steele 2000b); microzodiac text: *TCL* 6, 12+ (edited by Weidner 1967: 15–34).

¹¹ For a comprehensive study of the usage and conceptualisations of the terms *astronomia* and *astrologia* in antiquity, see Hübner 1989. Jones 2015a: 173–4 suggests that there was a greater separation in the Graeco-Roman world between practitioners of astronomy and astrology than in Mesopotamia, and that Ptolemy is exceptional in his depth of engagement with both.

¹² Ptol. *Tetr.* 1.1–3.

horoscopes.¹³ These interconnections were taken over and further developed in Greek and Roman celestial scholarship.

This does not mean that no ancient scholar made any conceptual or qualitative distinction between astronomical and astrological aims and methods. Cicero mentions various Greek philosophers and astronomers who rejected celestial divination, while according to Strabo most of the Chaldaean *astronomoi* disapproved of those who practised genethliology (birth astrology).¹⁴ Nor need we assume the same level of intellectual commitment to the various activities in which practitioners engaged: it is quite possible that astrological forecasting provided a means of earning a living for scholars whose primary focus was on the physical structure of the cosmos, as it did for later astronomers in medieval and early modern Europe. Yet we cannot assume a lack of commitment either. It is clear that for many celestial specialists in ancient Mesopotamia and the Greek world, observation, prediction and prognostication played equal parts in their understanding and interpretation of the astral realm and its connections to the terrestrial world. In what follows, the terms ‘astronomy’ and ‘astrology’ are used as descriptors for particular types of text or activities in which Babylonian and Greek scholars engaged, but these should be understood as modern classifications for ease of reference, with no implication that the same distinctions were meaningful for the ancient contexts described.

Another problematic term is ‘transmission’, which together with its complement ‘reception’ has been justifiably criticised by historians of science for potential implications of a one-way transfer of knowledge and passivity by the host culture. ‘Appropriation’ and ‘circulation’ are among the alternatives suggested as terms which give greater acknowledgement to the agency of the receiving culture.¹⁵ I have retained ‘transmission’ since it seems to me the

¹³ On celestial scholarship at the Neo-Assyrian court, see Hunger 1992: xiii–xxii; Koch-Westenholz 1995: 54–73; Verderame 2015; on the order of the planets: Rochberg-Halton 1988b; on the relationship between Late Babylonian astronomy and astrology, see pages 63–4.

¹⁴ Cic. *Div.* 2.42; Strabo 16.1.6.

¹⁵ See e.g. Sabra 1987, who favours ‘appropriation’ rather than ‘reception’ for engagement with Greek scientific tradition in the Islamic world; Ragep 1996, who links different approaches to transmission to wider debates in the history of science and highlights the

2.2 Pre-Hellenistic Contacts

most fitting for the specific case of Hellenistic celestial scholarship. Although it is important to acknowledge Greek agency, ‘appropriation’ tips the balance too far; it is clear from the comments about Chaldaeans in Greek and Latin sources that Babylonian astrological specialists actively sought to export their expertise, and as we will see, these specialists are probably also the initial links in the chain of cross-cultural transfer for the technical astronomy of the Late Babylonian period.¹⁶ ‘Transmission’ also captures more effectively than ‘circulation’ the reality that the transfer of knowledge and conceptions was for the most part from Mesopotamia outwards; as will be clear from the following discussion, there is very little evidence for reciprocal Greek influence. However, the use of the term is by no means intended to imply a simple transplantation of knowledge or interpretative paradigms from one cultural context to another: across all areas of celestial scholarship, elements of Mesopotamian origin were adapted and creatively combined with Greek (and indeed Egyptian) concepts and methods, and such evidence as we have suggests that both Babylonians and Greeks were active agents in this process.

2.2 Pre-Hellenistic Contacts

As Aristotle’s claim about Egyptian and Babylonian observations implies, Greeks were engaging with the celestial scholarship of their eastern neighbours well before the Macedonian conquest. Some Mesopotamian constellation and star names were borrowed in the late second or early first millennium and are attested in fragmentary Greek astronomical poems from the eighth to the sixth centuries BC.¹⁷ If reliable, Pliny’s claim that the astronomer Cleostratus of Tenedos introduced the *signa* in the zodiac suggests

reductionist views produced by under- and over-contextualisation (many of the other papers in this volume also engage explicitly with methodological issues). For ‘circulation’, see Steele 2016a: 1.

¹⁶ ‘Appropriation’ is also rejected for Babylonian and Greek astrology/astronomy by Jones (1996: 140) due to the difficulty of ascertaining Greek agency on the present state of the evidence.

¹⁷ West 1997: 29–31. A more extensive set of Greek star names of possible Mesopotamian derivation is offered by Bobrova and Militarev 1993 (updated version in Kurtik and Militarev 2005), although not all the etymologies are convincing.

that zodiacal constellations were known in the Greek world by the late sixth or fifth century, although not the uniform zodiac of twelve 30-degree *signs*, which was not invented in Babylonia until around 400 BC.¹⁸ Nor could the uniform zodiac have been known to Meton of Athens or his near-contemporary Euctemon around 430 BC: apart from questions of chronology, Daryn Lehoux has effectively demolished the thesis of Albert Rehm and Bartel Van der Waerden that Meton and Euctemon used zodiacal months to construct their *paraepgmata* (lists of dates of solstices, equinoxes and annual risings and settings of fixed stars, combined with weather predictions).¹⁹ Meton did, however, draw on Babylonian celestial scholarship in another way. The Metonic Cycle attributed to him (the period of almost nineteen years where the solar year and lunar month coincide, which enabled the development of consistent intercalation schemes) is almost certainly derived from Babylonia, where a similar cycle had been in use since around 500 BC.²⁰

Secure evidence for Greek knowledge of the zodiacal constellations, although still not necessarily the uniform zodiac, comes in the fourth century with the *Phenomena* of Eudoxos of Knidos (ca. 390–340 BC), known today via a commentary by Hipparchus of Nicaea and Aratus' versification of its contents in his *Phenomena*. Aratus' statement that each night six 'twelfth-parts (*duodekades*) of the (zodiacal) circle' set and six rise could refer to the zodiac signs, but he makes no explicit mention of the 360-degree zodiacal circle, and Hipparchus' criticism of Aratus for conflating the zodiacal constellations with the signs implies that neither he nor Eudoxos made this distinction.²¹ If *De Caelo* predates Alexander's campaigns, Aristotle's claims about planetary movements reported by

¹⁸ Plin. *HN* 2.30–31: *obliquitatem eius intellexisse, hoc est rerum fores aperuisse, Anaximander Milesius traditur primus Olympiade quinquagesima octava, signa deinde in eo Cleostratus*. On the invention of the Babylonian zodiac, see Brack-Bernsen and Hunger 1999; Britton 2010.

¹⁹ Lehoux 2007: 77–9 (*contra* Rehm 1949; Van der Waerden 1984; Bowen and Goldstein 1988: 53, 59–63). On the early *paraepgmata* and the development towards a zodiacal calendar (which was used in Hellenistic *paraepgmata*), see also Jones 2007: 154–64.

²⁰ Neugebauer 1975: 622–3; Bowen and Goldstein 1988.

²¹ Aratus, *Phaen.* 554–6; Hipparchus, *Comm. Arat.* 2.1.8. Van der Waerden (1953: 218) takes the Aratus passage as evidence for knowledge of the uniform zodiac; Dicks (1970: 156–7) and most later scholars have been more sceptical; see further pages 46–7.

2.3 The Hellenistic Period

the ‘Chaldaeans’ indicates that Greeks were also using Babylonian observational data before the Hellenistic period.²²

While these examples attest to cross-cultural contact, they are relatively isolated and self-contained; there is no evidence for detailed Greek knowledge of Babylonian astronomical or astrological scholarship before the third century BC. Unsurprisingly, then, the crucial period of cross-cultural exchange seems to have been that which brought the inhabitants of Greece and Mesopotamia into closer contact than ever before. We will examine the results of that contact across three areas of celestial enquiry: data and terms relating to celestial observation; methods of predicting celestial phenomena; and the concepts and techniques used to interpret the significance of these phenomena for events on Earth.

2.3 The Hellenistic Period

2.3.1 *Observing the Heavens*

One set of borrowings concerns the observation of celestial phenomena: specific observations from Babylonia and the units and terminology for making and recording them were adopted and utilised by Greek astronomers. Although the earliest Greek sources to preserve the observational data are often later, the point(s) of cross-cultural transmission for both data and terms can be traced back to the Hellenistic period.

The largest set of Babylonian observational data used in Greek astronomy relates to eclipses. Our major source here is Ptolemy of Alexandria. In his *Almagest*, completed between 150 and 161 AD, Ptolemy sets out in thirteen books his models for the structure of the universe and the movements of the Sun, Moon and planets.²³

²² Arist. *Cael.* 292a7–9. As Alan Bowen notes, the Babylonian observations mentioned by Aristotle could be connected with Simplicius’ (ca. sixth century AD) claim that Callisthenes sent back astronomical observations from Babylon while on campaign with Alexander (Simpl. in *Cael.* 506.11–15), a connection less problematic now that early datings of the *De Caelo* and *Meteorologica* have been rendered questionable (Bowen 2013: 295). Yet, as Bowen also points out, it is equally possible that Simplicius’ comment is a reconstruction based on the references in Aristotle.

²³ The terminus post quem is furnished by the Canobic Inscription, a text found in some medieval manuscripts of the *Almagest* which purports to be a copy of an astronomical

In the course of his calculations he uses eighteen records of lunar eclipses, of which he claims that the earliest ten (721–382 BC) were observed in Babylon.²⁴ The following report concerns an eclipse in 720 BC:

The second of the eclipses is recorded as having occurred in the second year of the same Mardukempados (= Marduk-apla-iddina II), on the 18th–19th of the month Thoth according to the Egyptian calendar (= March 8, 720 BC). It was eclipsed, it says, 3 fingers from the south at midnight. Since the midpoint in Babylon occurred exactly at midnight, in Alexandria it must have happened 5/6 of an hour before midnight, at which time the true position of the Sun was Pisces 13 ¾°.²⁵

Eclipses were a core concern in Mesopotamian celestial scholarship due to the negative events they were thought to portend, which included major upheavals for the state such as the death of the reigning king. The earliest surviving celestial omen texts, from the second millennium BC, relate to lunar eclipses, and about a quarter of the Akkadian celestial omen series *Enūma Anu Enlil* deals with eclipses of the Sun or Moon.²⁶ Since within the framework of Mesopotamian divination the events signalled by omens were not immutable and could be averted by the correct ritual action, much effort was invested in eclipse observation, and ultimately prediction.²⁷ Eclipses feature frequently in the astrological reports sent to the Neo-Assyrian kings by scholars in Assyria and Babylonia, and were taken very seriously by the court: in the case of a portended royal death a substitute king would be installed and ritually killed after a specified time period to fulfil the bad omen without harm to the reigning king, who went into hiding in the meantime.²⁸ Eclipses were also systematically recorded in the

inscription set up by Ptolemy in AD 147–148. As the Canobic Inscription uses some data which had been rejected in the finished version of the *Almagest*, it is assumed to predate it. See further Hamilton, Swerdlow and Toomer 1987; Jones 2005.

²⁴ See Steele 2000a: 92–3 for a table of all the eclipse observations.

²⁵ Ptol. *Alm.* 4.6 (Heiberg 1.303).

²⁶ Early celestial omens: Rochberg 2006. The lunar eclipse tablets of *EAE* (12–22) were published by Rochberg-Halton 1988c; an edition of the solar eclipse tablets (30–36) is being prepared by Rochberg.

²⁷ On the conceptual framework of Mesopotamian divination, see Hunger and Pingree 1999: 5–7; Rochberg 2004: 44–65. On eclipse prediction in Mesopotamia, see Hunger 1992: xix; Steele 2000c.

²⁸ The astrological reports are published in Hunger 1992. On the substitute king ritual see Parpola 1983b: xxii–xxxii; Rochberg 2004: 77–8, and, on its use under Alexander the

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Astronomical Diaries, cuneiform texts produced in Babylon from the sixth to the first centuries BC which contain nightly observations of selected celestial phenomena, with summary records of certain terrestrial events at the end of each month.²⁹ In the later first millennium Babylonian scholars also compiled separate lists of eclipses, probably from the Diaries.³⁰ The following report of a lunar eclipse which took place on 28 September 424 BC is typical of these records:

[(Year) 41], month VI, the 14th, 50°[?] after sunset, it began in the east and north. In 22° it left 2 fingers remaining to totality. 5° maximal phase. In 23° [it cleared] to | [. . .] 50° onset, maximal phase, and clearing. The ‘garment of the sky’ was there, the west wind blew. 3 cubits below α+β Arietis [it was eclipsed].³¹

The similarities between the cuneiform eclipse records and the observations cited by Ptolemy are sufficient to confirm the Babylonian origin of his eclipse data. At the same time, as John Steele has observed, differences in format and terminology reveal intermediary processes of conversion.³² The reports cited by Ptolemy use the Egyptian calendar rather than the Babylonian, and some of them record the time in seasonal hours (divisions of total daylight, of variable length during the year), whereas Babylonian eclipse reports use the degree (UŠ), a period of four minutes which is an equinoctial unit (i.e. it remains constant across the seasons). While Ptolemy himself could have made the calendar conversions, he cannot be responsible for the times in seasonal hours, since he immediately converts them back into equinoctial hours for his calculations.³³ This suggests one or more intermediary sources between him and the original Babylonian records.

In addition to the eclipse reports, Ptolemy also preserves three Babylonian planetary observations: two for Mercury and one for

Great, see pages 229–31. On Neo-Assyrian court scholarship more broadly, see pages 181–2 with references.

²⁹ For a list of eclipse predictions and records in the Diaries and other Late Babylonian texts, see Steele 2000d: Appendix A. On the Diaries, see further Sachs and Hunger 1988; 1989; 1996; Rochberg 2011; Pirngruber 2013; Haubold Steele and Stevens 2019 and Chapter 6. Steele (2019) has argued persuasively that AD –651 is not in fact a Diary; the earliest example of the genre is thus in the sixth century with AD –567.

³⁰ Steele 2000a: 95. ³¹ Hunger 2001 no. 9 rev. II 4’–5’. ³² Steele 2000a: 94–9.

³³ Steele 2000a: 96–7. On calendar conversions, see also Jones 2006d: 284–5; Steele 2011a: 459–60.

Saturn.³⁴ A Babylonian origin here is assured by the citation of dates ‘according to the Chaldaeans’, and the very close similarities to planetary observations from the Astronomical Diaries and similar texts. Indeed, the planetary observations quoted by Ptolemy are much closer in phrasing to the Babylonian observation reports than the eclipse records, with the calendar conversion (in this case from Babylonian to Macedonian) the only significant change.³⁵

Night of the 23rd, last part of the night (= 24 January 346 BC), Mercury was 2 cubits 8 digits below β Capricorni.³⁶

In the 75th year according to the Chaldaeans (= 75 SE, 237 BC), the 14th of Dios, morning, (Mercury) was half a cubit above the southern star of the Scales (= α Librae).³⁷

Who was/were Ptolemy’s sources for these observations, and when did they first enter Greek astronomy? The source often posited is Hipparchus of Nicaea, who was active on Rhodes in the second century BC and whose work is known mainly via Ptolemy himself.³⁸ Ptolemy does not actually cite Hipparchus as the source of the Babylonian observations, but notes that he used some of the same eclipse reports, and elsewhere states that Hipparchus ‘organised observations of the planets in a more useful way’, which might refer to the compilation of observational data from Babylonia.³⁹ As we will see in this chapter, Hipparchus certainly drew on Babylonian astronomy and is a likely source for at least some of Ptolemy’s observational records; the chronological span of the Babylonian reports in Ptolemy, the latest of which is from 229 BC, also fits Hipparchus’ period of activity. At the same time, Alexander Jones’ caution about the tendency to attribute everything in Ptolemy that does not seem to be his own to Hipparchus should

³⁴ Mercury: Ptol. *Alm.* 9.7 (Heiberg 2.267–268); Saturn: *Alm.* 11.7 (Heiberg 2.419).

³⁵ Jones 2006d: 273–6.

³⁶ AD –346 obv. 28; year and month are stated earlier in the Diary.

³⁷ Ptol. *Alm.* 9.7 (Heiberg 2.267).

³⁸ Toomer 1988, followed by Hunger and Pingree 1999: 157. On Hipparchus and his work, see more generally Neugebauer 1956; Neugebauer 1975: 274–343.

³⁹ Hipparchus’ use of Babylonian eclipse reports: *Alm.* 4.9 (Heiberg 1.332); 4.11 (Heiberg 1.342, 344); compilation of planetary observations: τὰς τηρήσεις αὐτῶν ἐπὶ τὸ χρησιμώτερον συντάξαι, *Alm.* 9.2 (Heiberg 2.210).

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be applied here too.⁴⁰ In particular, the fact that some of the lunar eclipse reports are quoted in seasonal hours and others in equinoctial hours may suggest that they come from multiple sources.

About the original mechanisms of cross-cultural transmission little can be deduced except that, as Jones notes, the translator(s) would have needed technical expertise in both Babylonian and Greek astronomy.⁴¹ The fact that the lunar eclipse records are all pre-Hellenistic whereas the planetary observations come from the third century BC need not entail different times of transmission, although it does suggest that several different original datasets were translated: Steele presents a compelling case for the Late Babylonian eclipse compilations being the source of the lunar eclipse records, while Jones argues that the Mercury and Saturn observations derive from planetary compilation texts, which contain collections of observations for a single planet for several consecutive years.⁴² As for the date(s) of transmission, while the survival of cuneiform scholarship until the first century AD makes it conceivable that some translations were made as late as the turn of the millennium, the fact that none of the observations postdate the third century BC rather implies an earlier date – perhaps the early second century BC when Babylonia was still under Seleucid control and connections with the rest of the Greek-speaking world were strong.

As well as observational data, the Greeks also adopted Babylonian units and terminology for measuring the sky. One scale was that of the ‘cubit’ and ‘finger’ (Akk. *ammatu* and *ubānu*; Greek *pechus* and *daktylos*). These were used as units of celestial distance in Babylonian observational texts, particularly the Astronomical Diaries; thus, in the observation of Mercury quoted above, the planet’s position in relation to the reference star β Capricorni is given in cubits and fingers. The earliest evidence for Greek use of these units is the second century BC, with Hipparchus. In his only work to survive complete, the *Commentary on the Phenomena of Aratus and Eudoxus*, Hipparchus sometimes expresses stellar distances in cubits or

⁴⁰ Jones 2006d: 279. ⁴¹ Jones 2006d: 275.

⁴² Steele 2011a: 454–60; Jones 2006d: 273–5.

fractions of cubits, and further celestial measurements in these units are attributed to him by Strabo and Ptolemy.⁴³

Perhaps the most important scale of celestial measurement, in antiquity and beyond, was the zodiac. Today we tend to associate the zodiac with astrology, but the establishment of a fixed system of co-ordinates along the ecliptic (the apparent path of the Sun along the celestial sphere, at the centre of the zodiac) was a powerful mathematical instrument which enabled much greater precision in celestial measurement. The uniform zodiac was a 360-degree circle divided into twelve equal signs of 30 degrees (Babylonian UŠ – this unit functioned as a measurement of both time and arc length).⁴⁴ It was invented in Babylonia at the close of the fifth century BC and from then on was used frequently in astronomical and astrological texts.⁴⁵ As we have seen, Greek knowledge of the zodiacal constellations is attested in the early fourth century with Eudoxos; in addition, the uniform zodiac and ecliptic are treated as familiar concepts in the mathematical works of Euclid and Autolycus, which were written around 300 BC.⁴⁶ However, the earliest unambiguous Greek evidence for the 360-degree zodiac and the use of the degree as a unit appears in the second century BC. The first witness is probably Hypsikles of Alexandria (ca. 190–120 BC), who describes the divisions of the zodiac in his work on the rising times of constellations, the *Anaphorikos*:

When the circle of the zodiac signs is divided into 360 equal arcs, let each arc be called a spatial degree (*moira topike*); and in the same way, when the period of time in which the zodiac returns to the same sign it has left is divided into 360 equal time periods, let each of the periods be called a temporal degree (*moira chronike*).⁴⁷

Further evidence for Greek use of the degree in the second century comes from Hipparchus. Although, as we have seen, he sometimes

⁴³ E.g. Hipparchus, *Comm. Arat.* 2.5.5, 3.5.2 (cubit); 2.5.1, 2.5.5–9; 2.5.14 (half-cubit); 2.6.6, 3.2.12, 3.3.9, 3.3.10 (two-thirds of a cubit); Strabo 2.1.18 (cubits); Ptol. *Alm.* 7.1 (fingers: Heiberg 2.4; 2.5; 2.7; 2.8; cubits: Heiberg 2.6); cf. Neugebauer 1975: 304, 591–2.

⁴⁴ Thus, four minutes is the time taken by 1/360 of the ecliptic to rise above the horizon.

⁴⁵ Brack-Bernsen and Hunger 1999; Britton 2010. ⁴⁶ Neugebauer 1975: 593.

⁴⁷ Hypsikles, *Anatolika* 55–9 (ed. de Falco, Krause and Neugebauer 1966).

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utilises cubits and fingers, he typically measures celestial distances in degrees, and this unit became standard in later Greek astronomy: Ptolemy cites measurements in cubits and fingers, but uses only degrees in his own work. The degree as a unit of celestial measurement is also attested in an astronomical inscription from Keskintos on Rhodes, dated to 150–50 BC and recently re-edited by Alexander Jones.⁴⁸ After a table dealing with planetary movements linked to a Great Year (the length of time thought to be required for all celestial bodies to return to the same positions in the sky, here calculated as 291,400 years), the inscription states that ‘a circle comprises 360 degrees, (or) 9,720 points’ (the ‘point’, *stigma*, is a further subdivision not known from Babylonian sources).⁴⁹ As the exact dates of Hipparchus and Hypsikles’ works are also unknown, it is possible that the inscription predates them; the fact that *moira*, ‘degree’, is written in abbreviated form, as a capital M with a small α above it also implies that the unit had already been in use for some time when the inscription was set up. At all events, by the middle of the second century BC Greek astronomers were not just drawing on observations from Babylon, but were utilising Babylonian units and terminology in their own observations and calculations.

2.3.2 *Predicting the Heavens*

Sustained observation reveals that celestial phenomena are periodic: as viewed from Earth the Sun, Moon, planets and fixed stars appear to move in repeating cycles, over time returning to the same places in the sky. By using these periodicities, and their relationships to each other, known as ‘period relations’, it is possible to predict future celestial phenomena. To take a simple example, knowing that Saturn repeats the same phase of its course in the sky on the same dates at intervals of fifty-nine years, one can project observational data from the current year to predict the occurrence of that phase in fifty-nine years’ time. By the

⁴⁸ IG XII.1 913; See Jones 2006b (revised edition); Jones 2006c (overall significance); Jones 2006a (detailed interpretation).

⁴⁹ IG XII.1 913: 14. On the figure for the Great Year in the Keskintos inscription and its relation to other figures in Graeco-Roman sources, see Jones 2006c: 220–2.

Hellenistic period the Babylonians had developed schemes based on period relations, some of great mathematical complexity, for predicting a range of celestial phenomena, including eclipses and the movements of the Moon, Sun and planets. These methods formed a second strand of cross-cultural borrowing. Unlike the observational data, whose Babylonian origins were typically signalled by Greek and Latin writers who used them, the full extent of Greek engagement with these Babylonian predictive methods was unknown until the twentieth century, when the decipherment of cuneiform astronomical texts and the publication of Greek papyri from Roman Egypt revealed Babylonian mathematical constants and schemes at the heart of Greek astronomical and astrological praxis.

2.3.2.1 *Astronomical Prediction in Mesopotamia*

The inhabitants of Mesopotamia were aware of the periodicity of certain celestial phenomena by the second millennium BC at the latest. Schemes for calculating the varying length of daylight throughout the year survive on cuneiform tablets from the Old Babylonian (1894–1595 BC) and Kassite (1595–1155 BC) periods, while certain omens from Tablet 63 of *Enūma Anu Enlil* (probably compiled in the late second millennium, but based on earlier observations) demonstrate knowledge that the visibility of Venus is periodic.⁵⁰ In the early first millennium, letters and scholarly texts from the Neo-Assyrian court in the eighth and seventh centuries and the relatively scant cuneiform evidence from Babylon during the same period reveal that scholars were utilising a number of simple schemes based on period relations to predict planetary, solar and lunar phenomena. Many of these schemes are preserved in the astronomical compendium MUL.APIN (‘Plough star’), which was compiled sometime between 1000 and 700 BC.⁵¹

In the second half of the first millennium, this ‘nonmathematical’ predictive astronomy based on period relations continued, and is

⁵⁰ Pingree 1998: 125–6.

⁵¹ Neo-Assyrian court: Hunger 1992: xix; Steele 2000c: 425–8; Brown 2000: 161–207. MUL.APIN: Pingree 1998: 126; Brack-Bernsen 2005; Steele 2013a: 6–14; Hunger and Steele 2018.

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represented by texts known to modern scholars as Goal-Year Texts, Almanacs and Normal Star Almanacs.⁵² All these texts use period relations and observational data excerpted from the Astronomical Diaries to calculate dates and positions for particular planetary and lunar phenomena in a future target year. The Goal-Year Texts are organised in sections containing the relevant phenomena for each celestial body; the Almanacs and Normal Star Almanacs are probably derived from them and organise the data by month and day, with the former charting planetary movements through the zodiac and the latter in relation to a set of reference stars.⁵³

At the same time, Babylonian scholars also developed complex mathematical schemes to calculate the positions and dates of solar, lunar and planetary phenomena. This was done using arithmetical operations: addition, subtraction, multiplication and division. Cuneiform astronomical texts do not mention or presuppose a geometric model of the cosmos as a set of objects moving in space, although it cannot be excluded that such models existed in Babylonia, and various conceptions of the universe are attested in the literary material.⁵⁴ Two basic mathematical schemes were used to model the movements of the Moon and planets: System A, which is based on step functions (where the changing velocity of an object is modelled as jumping between two or more constant speeds), and System B, based on linear zigzag functions (the object's speed is assumed to increase and decrease in constant increments between a maximum and minimum).⁵⁵ Both systems were used throughout the Hellenistic period in Babylonia.

Several hundred cuneiform tablets from Hellenistic Babylon and Uruk contain this type of mathematical astronomy, utilising

⁵² On the classification and types of 'non-mathematical' astronomical texts (often abbreviated to NMAT), see Sachs 1948; Aaboe 1980: 15–23; Hunger 1999; Hunger and Pingree 1999: 159–72.

⁵³ The Goal-Year Texts are edited in Hunger 2006; the Almanacs and Normal Star Almanacs are edited in Hunger 2014. On the relationship between the three, see Gray and Steele 2008.

⁵⁴ The highly publicised Hellenistic cuneiform tablet on the path of Jupiter recently published by Mathieu Ossendrijver (Ossendrijver 2016b) attests to the application of geometrical methods to astronomical calculation, but not to a geometric model of the heavenly bodies. On models of the universe in Mesopotamian literary texts, see page 256 with n.4.

⁵⁵ For a brief overview of Babylonian mathematical astronomy, see Ossendrijver 2015. The best in-depth treatments are still Neugebauer 1955b; Neugebauer 1975 Vol. II.

System A and B schemes. In terms of their content, they are divided into three groups by modern scholars: ephemerides, tabular texts which contain calculations for dates and positions of lunar, solar or planetary phenomena; auxiliary tables, which contain mathematical functions related to but not directly used in the ephemerides; and procedure texts, which explain how to construct and use the ephemerides and auxiliary tables.⁵⁶ Figure 2.1 shows a cuneiform tablet from Babylon containing a System A ephemeris for Jupiter for the years 165–93 BC.

The recognition that celestial phenomena were predictable apparently did not conflict with their interpretation as messages from the gods. Indeed, as we shall see later, there are close links between the astrology of the Late Babylonian period and both ‘mathematical’ and ‘nonmathematical’ predictive texts.⁵⁷

2.3.2.2 Greek Borrowings

In contrast to the arithmetic models used in Babylonian astronomy, Greek models of the cosmos were kinematic – representing the celestial bodies as spherical objects moving along circular paths in space – and Greek astronomers developed geometric methods, using trigonometry, in order to model these movements mathematically.⁵⁸ Despite these differences, however, a number of values and parameters from Babylonian mathematical astronomy were taken over by Greek astronomers and integrated into their geometric models.

The first explicitly attributed borrowings of this type date from the late Hellenistic period. In his *Introduction to the Phenomena*, probably written in the first century BC, Geminus uses a value for

⁵⁶ On the classification, see Neugebauer 1955b: Vol 1, 1. Many tablets containing mathematical astronomy were copied in Strassmaier and Pinches 1955, most of which were edited by Neugebauer 1955b. Many further texts, and new readings of some of the *ACT* tablets, have since been published: see Aaboe 1964; 1968; 1969; 1971; 1977; 1987; Aaboe and Henderson 1975; Aaboe and Huber 1977; Steele 2000b; 2002a; 2002b; 2006a; 2010b; 2010a. A revised and expanded edition of the procedure texts has been published by Ossendrijver 2012, and a new edition of the ephemerides is in preparation (Ossendrijver forthcoming).

⁵⁷ See pages 63–4.

⁵⁸ On the differing frameworks and interests of Greek and Babylonian astronomy, see further Neugebauer 1975: 2–5; 575–8; Rochberg 2004: 23–5.



Figure 2.1 System A ephemeris, Jupiter (BM 34571) © Trustees of the British Museum

the mean daily motion of the Moon ‘found by the Chaldaeans’.⁵⁹ Both this value and other lunar parameters used in the same chapter (which are not explicitly associated with the Chaldaeans) are Babylonian in origin, deriving from the lunar theory of ‘System B’.⁶⁰ But at least some Babylonian mathematical astronomy had reached the Greek world earlier, with Hipparchus, who not only used Babylonian observational data but also drew on period relations and other parameters derived from Babylonian astronomy for his own predictive models. Beginning with Franz Kugler’s discovery of several period relations used by Hipparchus

⁵⁹ Geminus *Isagoge* 18.9. The *Isagoge* has been dated to various points within the first centuries BC and AD based on its citations and a comment about the calendar date of the Egyptian festival the Isia, but the most recent dating to 90–25 BC by Alexander Jones using new papyrological evidence (Jones 1999a) is decisive. For a summary of the debate, see Evans and Berggren 2006: 17–22.

⁶⁰ Neugebauer 1975: 584–7; Rochberg 2008: 18–19.

in earlier astronomical cuneiform tablets from Babylon, Babylonian parameters have gradually been uncovered in much of Hipparchus' work, including his lunar theory, which uses the same System B values as are found in Geminus.⁶¹ Indeed, Hipparchus may well be Geminus' source here, although he is not mentioned directly.

Until the second half of the twentieth century, it was generally thought that this was as far as Greek borrowings from Babylonian mathematical astronomy went: the plugging in of individual values and parameters to Greek geometric models. Thus, Otto Neugebauer concluded in his 1975 *History of Ancient Astronomy* that Babylonian influence on Greek lunar theory 'did not reach much farther than the communication of some basic concepts and related parameters' and on planetary theory was limited 'to the transmission of fundamental period relations'.⁶² That changed with the publication of the Greek astronomical and astrological papyri from Roman Egypt, in particular Oxyrhynchus. This material revealed that practitioners in the first and second centuries AD – contemporary with Ptolemy – were calculating lunar, solar and planetary positions using not empirically derived geometric models like those of the *Almagest*, but the arithmetic schemes of Babylonian mathematical astronomy.⁶³ The papyri include tables of lunar and planetary positions and a few procedure texts, and exhibit significant similarities with their Babylonian forerunners. They attest to knowledge of both System A and B schemes, although the formats and the focus of the calculations are different from those in Babylonia, and in some cases the original schemes have been considerably adapted.⁶⁴ One fragment even seems to mention *Orchenoi*, 'Urukeans', which could indicate awareness of the Babylonian origins of the contents.⁶⁵

⁶¹ See in particular Kugler and Strassmaier 1900: 20–40; Aaboe 1955; Neugebauer 1975: 274–331; Toomer 1988.

⁶² Neugebauer 1975: 604.

⁶³ Van der Waerden 1972; Neugebauer 1988; Jones 1990; Jones 1993: 82–6; Jones 1999c.

⁶⁴ On the varieties of astronomical papyri and their chronological and geographical distribution, see Jones 1994: 27–37; Jones 1999b; Jones 1999c Vol I: 34–47. For details of the Greek arithmetical schemes in the papyri and their relationship to the schemes of Babylonian mathematical astronomy, see Jones 1996: 145–8; Jones 1999c Vol I: 17–33.

⁶⁵ *P.Oxy.Astr.* 4139 l.8; cf. Rochberg 2008: 18. The line reads $\alpha\nu\tau\omicron$ [] $\omicron\rho\chi\eta\iota$ with room for about 2 letters in the break; the line ends at the edge of the papyrus with nothing missing.

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Nor was the use of Babylonian methods limited to provincial astrologers in Oxyrhynchus. Elements of both System A and B schemes have been found in later Greek and Roman astronomical and astrological works, Indian treatises based on Greek originals, and perhaps most significantly of all, in the work of Hipparchus: Jones' re-analysis of the relevant passages of the *Almagest* demonstrates that Hipparchus did not just plug in Babylonian parameters to his models, but used modified versions of System A and B lunar theory to calculate solar and lunar longitudes.⁶⁶ It is also likely that Hipparchus drew on Babylonian schemes to develop hypotheses about phenomena for which observational data were lacking: for instance, the eclipse predictions of the 'astrologers' (*astrologoi*) he cites as evidence against the idea that the Sun deviates laterally from its path along the ecliptic must, as Jones observes, be derived from Babylonian predictive schemes.⁶⁷

Eclipse prediction techniques which originated in Babylonia also feature in the Antikythera Mechanism, a unique mechanical device for modelling astronomical and calendrical cycles which was made somewhere in the Greek world (possibly Rhodes) in the second or first century BC, and was discovered in fragments in a shipwreck off the island of Antikythera in 1901 (Figure 2.2).⁶⁸

The Mechanism uses gearwork and dials to simulate the movements of the Sun, Moon and planets and their relationships to the cycles of time which governed human life. The reverse contains a dial for predicting lunar and solar eclipses, based on an eclipse

although it is possible that the word continued on the following line. The final letter looks more like iota than the end mark used in the preceding lines (suggested by Jones 1999c Vol I: 99 n.8), but it is difficult to suggest an alternative restoration, and a reference to *Orchenoi* here would fit the broader usage of the term among Graeco-Roman authors as not simply an ethnic or geographical descriptor but, parallel to *Chaldaioi*, a word for those associated with a particular type of celestial expertise or theory (Jones 2019).

⁶⁶ Graeco-Roman material: Neugebauer 1975: 605–6; Jones 1993. Indian treatises: Pingree 1963; Pingree 1973a. Hipparchus: Jones 1983: 24–7 (lunar longitudes); Jones 1991a (solar longitudes).

⁶⁷ Jones 1991b: 449; Jones 1993: 68.

⁶⁸ Jones 2017 is now the definitive holistic study of the Mechanism. On its reconstruction and functioning, see also Freeth *et al.* 2006; Freeth *et al.* 2008; Freeth and Jones 2012; on the inscriptions, Allen *et al.* 2016. On Rhodes as a possible place of manufacture, see Jones 2017: 93–4 with references.



Figure 2.2 The Antikythera Mechanism, National Archaeological Museum, Athens; photograph Kostas Xenikakis. © Hellenic Ministry of Culture and Sports/Archaeological Receipts Fund

cycle known as the Saros: a period of 223 months after which eclipses recur in nearly identical sequence due to the Sun, Moon and Earth returning to approximately the same relative positions in space.⁶⁹ This eclipse cycle was known in Babylonia by the sixth century BC, and the Late Babylonian eclipse compilation texts which were probably the source of Hipparchus and his successors' eclipse observations are also arranged in Saros cycles.⁷⁰ The method of eclipse prediction on the Mechanism shares several similarities with the Babylonian eclipse texts, suggesting they may be the ultimate source here too.⁷¹ It also appears that an arithmetic scheme of System B type was used to compute the predicted eclipse times inscribed on the dial.⁷² Although the Mechanism's planetary displays are based on Greek geometric models, these, as we have seen, utilised values derived from Babylonian astronomy.⁷³ The device therefore offers a uniquely tangible example of the synthesis of Babylonian and Greek astronomy in the Hellenistic world.

⁶⁹ Steele 2000c: 431–2; Steele 2011a: 461; Jones 2017: 128–60.

⁷⁰ Steele 2011a: 454–7. It is probable that the Saros was known in the Greek world by the early third century BC: Aristarchus of Samos may have used it to derive a value for the length of the Great Year, if Tannery's emendation of the transmitted numbers is correct (Tannery 1888).

⁷¹ Steele 2011a: 461–5; Jones 2017: 153.

⁷² Carman and Evans 2014; Freeth 2014: Note S4.

⁷³ On the Mechanism's planetary theory and its relationship to Babylonian and Greek models, see Jones 2017: 161–99.

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2.3.2.3 *Transmission*

The use of Babylonian arithmetical schemes by Greek astronomers and astrologers not only undermines a strict contrast between Babylonian and Greek concepts and methods, but also requires us to posit more intense and direct cross-cultural contact than for the borrowing of single observations and parameters. While it would be possible to utilise discrete elements of the mathematical schemes without knowing the original theoretical framework in which they were embedded, to be able to use and adapt the schemes themselves would require extensive study; this would probably include oral instruction, since the astronomical tables do not include information on how to use them and even the procedure texts assume a significant degree of prior knowledge. It therefore seems unavoidable that there was direct contact between Babylonian and Greek specialists at some point.

How and when did that contact occur? On the Greek side one trail again leads back to Hipparchus as the earliest witness to the borrowings, although Jones is sceptical about his role in the actual transmission since there is no evidence for him writing *about* the schemes as opposed to simply using them.⁷⁴ The pathways by which System A and B astronomy eventually reached the sands of Oxyrhynchus are unknown: probably via Alexandria, and perhaps ultimately via Hipparchus too, but the lack of intermediary sources from Egypt makes it impossible to do more than speculate. On the Babylonian side we can get a little further. Jones suggests that the mathematical schemes were transmitted by Babylonian scribes who took their skills elsewhere in the Hellenistic world, and three Babylonians are in fact named by later Greek and Latin writers in connection with mathematical astronomy, two of whom can potentially be identified in Hellenistic cuneiform sources.⁷⁵ Strabo names three Chaldaean *astronomoi* who are mentioned by Greek *mathematikoi* (mathematicians/astronomers): Kidenas, Nabourianos and Soudines.⁷⁶ Strabo himself does not attribute any particular knowledge or techniques to

⁷⁴ Jones 1993: 88. On the other hand, so little of Hipparchus' work survives that these may be insufficient grounds to dismiss a connection.

⁷⁵ Jones 1993: 88. ⁷⁶ Strabo 16.1.6.

these men, but Kidenas and Soudines/Sudines (as he appears in other Greek and Latin sources) are cited by Pliny and Vettius Valens in connection with calculations relating to the Moon and planets. Pliny attributes to Kidenas a figure for Mercury's maximum elongation (the point where it is furthest from the Sun as seen from Earth); writing in the second century AD, Valens claims that he used Sudines and Kidenas for the computation of lunar eclipses, and associates them with a particular value for the length of the solar year.⁷⁷ Kidenas is also credited by an anonymous source from the third century AD with a lunar period relation which derives from System B.⁷⁸

Kidenas and Nabourianos find potential onomastic matches in the colophons of three astronomical cuneiform tablets from Hellenistic Babylon.⁷⁹ Kidenas has been linked to two ephemerides containing calculations for new and full Moons, which are classified in their colophons as 'tersētu' (astronomical table) of 'Kidīn' or 'Kidīn-Anu' (depending on the reading of the signs) and 'tersētu of Kidīnnu' respectively.⁸⁰ The first was written in 103 BC; the other lacks a date but contains calculations for 77–76 BC and was probably written around that time.⁸¹ These tablets may or may not refer to the same individual, as is usually assumed; Kidīn or Kidīnnu could both be byforms of Kidīn-Anu, but the thirty-year time gap between the tablets rather suggests that these are different people. Any of the names Kidīn-Anu, Kidīn or Kidīnnu could be reflected in Greek *Kidēnas* (although Kidīn-Anu might help to explain the

⁷⁷ Plin. *HN* 2.38–9; Vett. Val. 9.12.10. Sudines also seems to be mentioned, in the form Σωδίνων, in a list of canonographers in one of the Vatican manuscripts of the *Aratea* (*Vat gr.* 381: Maass 1892: 140–3; reprinted in Pingree 1986: 455).

⁷⁸ *CCAG* 8, 2: 126, 15.

⁷⁹ The colophon is the section at the end of the tablet containing paratextual information: usually the title of the composition, the date and source of the copy, and the name of the owner and/or scribe.

⁸⁰ *ACT* 122 (colophon Zo); 123a (colophon Zka). The identification with Kidenas was originally made by Schiaparelli 1908: 16ff (on the basis of the tablet mentioning Kidīnnu). The colophon of *ACT* 122 reads *ki-din* and then the sign DIŠ or 60; 60 is a logographic writing for the name of the god Anu, so this could be the name Kidīn-Anu with the divine determinative omitted (Hunger 1968: no. 170 n.2). As the DIŠ cannot otherwise be construed, it is likely that we do have here Kidīn-Anu.

⁸¹ It is not possible to date astronomical tablets precisely from the contents, since scholars might make calculations for past and future years. However, in cases where tablets also preserve a date of writing in the colophon, it is usually within a few years of the date of the calculated data.

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ending in *-as*).⁸² A third tablet with calculations of new moons written in 49 BC has the partially broken label ‘*tersētu* of Nabû-...-mannu’, which has been restored as Nabû-rēmannu as an Akkadian equivalent for Nabourianos (intervocalic /m/ was pronounced /w/ in first-millennium Akkadian).⁸³ However, while Nabû-rēmannu is plausible phonetically, it is not a grammatical Akkadian form, and the reading of the signs on the tablet is uncertain; the reading of this name is therefore not beyond doubt.⁸⁴ As yet no specific contender for Sudines has been identified in cuneiform sources, although his name looks Akkadian: a likely possibility phonetically is *Šum(a)-iddin* ‘He gave the name’ or *Šum(a)-iddina* ‘He gave me a name’.⁸⁵ Both names are attested in Babylonian sources from the Neo-Assyrian to the Hellenistic periods.⁸⁶ Sudines has a further career in Greek and Latin authors as a diviner, an authority on astrological matters and an expert on the properties of stones, and we will meet him again in [Chapters 5](#) and [6](#).

⁸² Kidin-Anu would have been pronounced [kidinan] or [kidīnan] (final short vowels were lost in first-millennium Akkadian) which could have been Hellenised as *kidēnās*.

⁸³ *ACT* 18 (colophon Zq); identification first suggested by Schnabel 1923: 132, 222 (crediting an oral communication from Weissbach for the equivalence between Ναβουριανός and *Nabû-rēmannu*).

⁸⁴ The name would mean something like ‘Nabû, have mercy on me’, with *rēm* being the imperative of the verb *rēmu*, ‘have mercy on, feel compassion for’, but the first person accusative suffix is *-anni*, not *-annu*, and there are no parallels for names of this type ending in *u*. Additionally, the spelling of names in *-rēmanni* usually follows morpheme boundaries even to the point of broken syllabification (e.g. ^damar.utu-rēm-a-ni); this affords further reason to doubt *-rēmannu*. The sign before *man* on the tablet is unclear; based on collation from a recent photograph, if it is RI, there seems to be another sign before it (which looks rather like UD); alternatively, one long sign follows ^dna and in this case it cannot be RI.

⁸⁵ The equation of Sudines and *Šum(a)-iddin* was proposed by Schnabel 1923: 132. Intervocalic /m/ became /w/ in Late Babylonian and was lost in contact with /o/ or /u/, so the pronunciation would have been something like [šuidin] (cf. Westenholz 2007: 284–5). It is plausible that the u sound dominated and resulted in the Greek Σουδίνης, Lat. Sudines (<ου>) is used in the Graeco-Babyloniaca tablets to represent Akkadian /ū/).

⁸⁶ Several Babylonians named *Šuma-iddin* or *Šuma-iddina* (it is not always possible to distinguish with logographic spellings) appear in documents from the Neo-Assyrian period, including a scholar who sent in an astrological report to Esarhaddon (*SAA* 8, 500) and a governor of Nippur accused of a conspiracy against the same king (*SAA* 10, 112 obv. 28–rev. 14); see *PNA* 3/II: 1292–1293. A number are also attested in later first-millennium texts from Babylonia, including the horoscope from Babylon cited on page 63, and various legal texts from Uruk (*SpTU* 1, 131 rev. 5'; *SpTU* 2, 57 obv. 9; *SpTU* 5, 292 obv. 1, 10, 14, 16, rev. 1, 4, t.e. 3; *BRM* 2, 51 obv. 4). As yet no Late Babylonian scholar by either name is known.

These onomastic identifications are plausible, and the contents of the tablets certainly fit these writers' reputations as authorities on astronomical matters. It is therefore likely that Nabourianos and Kidenas were cuneiform scholars from Babylon active in the late Seleucid or early Parthian period. Unfortunately the cuneiform evidence does not afford much further insight into the careers of these individuals or their potential involvement in the transmission of astronomical knowledge to the Greek-speaking world. A Kidin(n)u also appears in an earlier Akkadian Chronicle from the time of Alexander the Great, being put to death 'by the sword' in August 330 BC.⁸⁷ The fact that this Kidinnu is mentioned without further contextualisation suggests that he was a significant figure locally, but nothing else is known about him, and in the absence of other evidence there seems no good reason to connect him with the person(s) named on the later astronomical tablets. No other individuals bearing these names are attested in cuneiform sources from Babylon, although Kidin-Anu was a common name among the priestly families in Hellenistic Uruk; perhaps Kidenas may have come from there.⁸⁸ Whichever city or cities the two called home, both must have been members of the temple elite and of the even smaller subgroup with specialised training in mathematical astronomy.

What of their intellectual contributions to that community? It has been suggested that the '*tersētu* of PN' statements in the colophons are crediting Kidin(nu)/Kidin-Anu and Nabû-[rē]mannu with the invention of a particular astronomical technique or theory. Authorship attributions are very rare in cuneiform scholarship and usually involve exceptional (often divine) individuals, so if these statements are authorship claims, they suggest that Kidinnu and Nabû-[rē]mannu were extremely significant figures – as indeed we might expect if they became known by name in the Graeco-Roman world. But these individuals may simply be the 'owners' of the tablets, senior scholars who either physically owned the copy or were overseeing its production by the more

⁸⁷ *BCHP* 1 obv. 8'.

⁸⁸ The name is common in the Ekur-zākir family, who boasted several scribes of *Enūma Anu Enlil*, including our Anu-aḫa-ušabši. For individuals attested with this name, see Grainger 1997: 411–24.

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junior scribe.⁸⁹ Their names appear first in the colophon, where the owner is usually listed, and are followed by the name of a second individual who in one case is explicitly identified as the scribe.⁹⁰ At the same time, there are two irregularities which may point more towards authorship. First, two of the *tersētu* labels read ‘*tersētu* of PN concerning the year X (Arsacid Era) which is equivalent to the year Y (Seleucid Era)’; details of tablet content are normally given before the ownership statement, which suggests that these labels may be referring to an earlier scholar’s work or method. The remaining Kidinnu colophon states that the second named individual, one Bēl-aba-ušur, ‘computed the calculations with his own hand’; this phrase is typically used when a tablet is produced by one individual rather than an owner-scribe pair, and again suggests that Kidinnu is an earlier scholar whose work is being utilised rather than someone involved in the production of the surviving tablet.

When and how did these scholars or their work transcend the temple communities of Babylonia to circulate in the Greek-speaking world? If Kidin-Anu/Kidinnu and Nabû-[rē]mannu are famous earlier scholars whose calculations or techniques were being used in the first century, we have no chronological anchor for them (unless Kidinnu *is* the man put to death in 330). But if they are the owners of the tablets produced in the late second or first centuries, or lived close to that time, their period of activity postdates Hipparchus. Thus, if these *are* Kidenas and Nabourianos, the cuneiform evidence enables us to distinguish a later phase of transmission of Babylonian astronomical knowledge to the Greek world in the first century BC. Fitting this with Jones’ idea that Hipparchus was primarily responsible for the transmission of observational data and that full knowledge of the Babylonian arithmetical schemes came by other means, we might suggest that the latter took place in the first century with the

⁸⁹ The meaning of the term ‘owner’ in colophons is not entirely certain. Scholars tend to appear as ‘scribe’ early in their career and later as ‘owner’ (Pearce and Doty 2000: 336); suggesting that junior scribes wrote tablets for more senior scholars as part of their training. Mathieu Ossendrijver has argued that ‘ownership’ does not indicate possession at all but rather a responsibility for the correctness of the tablet’s contents (Ossendrijver 2011b; Ossendrijver 2011a).

⁹⁰ Scribe: Zka. Zo is broken but has two names following.

involvement of Kidinnu and his colleagues.⁹¹ The fact that Babylonian scholars' names survived attached to this knowledge at all suggests that they themselves were instrumental in the process, either as instructors of Greek-speaking pupils who disseminated their teachings, or as authors of Greek treatises which translated and explained the workings of the Babylonian schemes. Precisely how this happened, or how their work eventually became known to writers in Rome, remains a matter for speculation.

2.3.3 *Interpreting the Heavens*

The parameters and schemes devised by Babylonian and later Greek scholars to account for the motion of the heavenly bodies were not only put to purposes we would class as 'astronomical'. They were also an indispensable tool for interpretative processes by which celestial phenomena were used to predict events on Earth: what today we would call astrology. The Chaldaeans were famed in the Graeco-Roman world for their skills in celestial prognostication, and an increasing number of aspects of Graeco-Roman astrology have now been traced back to Mesopotamian antecedents, from the basic idea of using the heavens to divine terrestrial affairs to detailed concepts and methods. These astrological borrowings should not be divorced from the borrowing of observational data or mathematical schemes: in Mesopotamia these were three strands of an integrated discipline, and so they remained for most Greek and Roman practitioners. Indeed, for many the main goal was probably astrological and the astronomical data and schemes were the means to an end.

In ancient Mesopotamia two main types of astrology can be distinguished: an older form based on omens which can be traced back to the early second millennium BC, and a newer form utilising the zodiac which developed in the later first millennium, although both were practised until the end of cuneiform culture. Knowledge of Mesopotamian omen divination spread across the

⁹¹ Jones 1993: 88–9.

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Near East in the later second millennium, facilitated by diplomatic relationships between the ‘great powers’ of Egypt, the Hittite empire, and Babylonia (and later Assyria), which exchanged resources and personnel and used Akkadian as a *lingua franca*.⁹² However, the main period of transmission for both types of Mesopotamian astrology to the Graeco-Roman world seems to have been the Hellenistic period. We will therefore consider both Mesopotamian astrological traditions first, then examine their reflexes in Greek, before turning finally to mechanisms of transmission and the question of reciprocal Greek influence.

2.3.3.1 *Mesopotamian Astrology: From Celestial Omens to Horoscopes*

The older form of Mesopotamian astrology was, like other branches of Mesopotamian divination, based on omens of the form ‘if X happens (in the sky), Y will happen (on Earth)’. Like most of the other divinatory disciplines too, this celestial divination was focused on the state; events forecast on Earth related to the country or people as a whole or the king as its figurehead. Celestial phenomena were regarded as a signs, not causes, of the terrestrial events they foretold: they were messages from the gods, part of the ‘heavenly writing’ by which they used the sky to communicate with the human realm.⁹³ Correlations between celestial and terrestrial phenomena were based on various theoretical and symbolic associations, including analogy and paronomasia.⁹⁴ The following celestial omens exemplify the typical content and style:

If the Sun is eclipsed in (the month) Ayyāru on the first day: the land will be thrown into confusion. Armies will rise.⁹⁵

If a planet approaches Jupiter: business will decrease, the flocks will gather in a fortress; Erra (god of war and plagues) will devour the land; high water will sweep away the land. King will send messages of hostility to king; there will be a severe collapse; there will be severe heat in summer; there will be severe cold in winter.⁹⁶

⁹² Koch-Westenholz 1993; Koch-Westenholz 1995: 41–51; Rutz 2016.

⁹³ Koch-Westenholz 1995: 11–12; Rochberg 2004: 1–4. ⁹⁴ Rochberg 2004: 54–8.

⁹⁵ UCP 9-9, 398–9, obv. 13’ (Copy of *Enūma Anu Enlil* 33 from Seleucid Uruk).

⁹⁶ TCL 6, 16 obv. 31–2 (Copy of *Enūma Anu Enlil* 56 from Seleucid Uruk).

The earliest surviving celestial omens from Mesopotamia date from the Old Babylonian period (1894–1595 BC); these were collected into increasingly standardised lists, and although cuneiform sources from Mesopotamia itself are scarce in the later second millennium, some form of the celestial omen series *Enūma Anu Enlil* was circulating in peripheral regions by the fourteenth century.⁹⁷ When the sources from Mesopotamia become abundant once more in the Neo-Assyrian period they reveal that *Enūma Anu Enlil* now existed as a series of some seventy tablets containing 6500–7000 celestial omens and circulated in a form which was relatively (although never completely) standardised. The series functioned as a core reference work for scholars working at the Neo-Assyrian court, and continued to be copied and studied by temple scholars in Babylonia in the later first millennium BC.⁹⁸

During this latter period, a new type of astrology developed in Babylonia. Unlike the tradition centred on *Enūma Anu Enlil*, which was based on unprovoked celestial omens and was concerned with the fate of the king and the land as a whole, this type depended on the newly invented zodiac, utilised the predictive methods of mathematical astronomy, and focused to a greater extent on the individual. Late Babylonian zodiacal astrology had a number of branches, including astrological medicine, in which signs of the zodiac were associated with various body parts, diseases or therapies, and astrological geography, where zodiacal signs were correlated with countries and cities for prognostic purposes.⁹⁹ The branch which was to have the most lasting legacy outside Mesopotamia was genethliology, birth astrology, which utilised the positions of the planets and luminaries (Sun and Moon) in the zodiac at the time of an individual's birth to derive predictions for their future. The relevant astronomical data were listed in cuneiform texts which are sometimes called 'horoscopes' after their later Greek and Roman

⁹⁷ Koch-Westenholz 1995: 36–51; Hunger and Pingree 1999: 7–12; Rochberg 2006.

⁹⁸ On *Enūma Anu Enlil* and its uses in the first millennium, see Koch-Westenholz 1995: 51–96, 162; Pingree 1997: 15–20.

⁹⁹ For a survey of Late Babylonian zodiacal astrology, see Koch-Westenholz 1995: 162–79. On astrological medicine, see Heeßel 2008; on astrological geography, Weidner 1963; Steele 2015b.

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analogues, although some scholars prefer ‘proto-horoscopes’ or ‘personal nativities’ due to differences from the Graeco-Roman examples.¹⁰⁰ Twenty-eight cuneiform horoscopes survive, dating from the fifth to the first centuries BC. They list the positions of the Sun, Moon and five planets in the zodiac at the moment of birth and give data regarding the phases of the Moon. Celestial events of particular ominous significance which occurred in the days or weeks surrounding the birth, such as eclipses or sightings of comets, may also be mentioned. Sometimes the name of the child is given; in other cases it is simply stated that ‘the child was born’. The following horoscope from Babylon – one of the oldest known to date – deals with a birth in 410 BC:¹⁰¹

AB 251

obv.

1. Nisannu, night of the 14th(?) (= April 29) [... PN],
2. son of Šuma-ušur, son of Šuma-iddin, descendant of Dēkē, was born.
3. At that time, the Moon was below the Pincer of the Scorpion,
4. Jupiter was in Pisces, Venus
5. in Taurus, Saturn in Cancer,
6. Mars in Gemini. Mercury, which had se[t], was no[t visible].
7. Nisannu, the 1st, (duration of visibility of the new lunar crescent was) 28 (UŠ), [duration of visibility of the Moon after sunrise] on the 14th (?) was 4,40 (UŠ).
8. The 27th, last lunar visibility.

rev.

1. (Things?) will be good for you [...]
2. Du’ūzu, year 12 [...]
3. [yea]r(?) 8 [...]

rest broken.

While celestial omen divination depended on the observation of heavenly phenomena as and when they occurred, the astrology of the later first millennium marked a shift towards prediction and calculation. Some of the astronomical phenomena recorded in the

¹⁰⁰ The first cuneiform horoscopes were published by Sachs 1952; all those known to date were edited in Rochberg 1998. ‘Proto-horoscopes’: Pingree 1997: 22; Hunger and Pingree 1999: 26–8; Jones and Steele 2011: section 3 with n.37; ‘personal nativities’: Pingree 1997: 20. On the relationship between cuneiform and Greek horoscopic astrology see pages 72–82.

¹⁰¹ Edition and translation adapted from Rochberg 1998 Text 2. Copy: Campbell Thompson 1927 Plate 2; photograph: Sachs 1952 Plate IV.

horoscopes could be based on observation, but not all would have been observable from Babylon at the relevant date and time. Furthermore, horoscopes might sometimes be produced long after the birth, by practitioners who would be unlikely to have access to comprehensive observational records for the previous thirty to sixty years. The various astronomical schemes of the Late Babylonian period, which enabled scholars to calculate the positions of the heavenly bodies on any given date, therefore constituted an indispensable tool of horoscopy, and indeed Francesca Rochberg has shown that the surviving horoscopes draw on both non-mathematical and mathematical astronomical texts.¹⁰² This is not to say that astronomy was driven by astrological aims: as Rochberg stresses, the complexity of the mathematical schemes goes beyond the requirements of the surviving astrological texts and it is difficult to make exact connections between the ephemerides and the horoscopes.¹⁰³ However, it is clear that the different strands of Mesopotamian celestial enquiry are intimately related to each other and that any attempt to divorce the ‘scientific’ astronomical texts from the horoscopes or other astrological texts is misguided.

Our knowledge of precisely how the phenomena recorded in the horoscopes were interpreted is limited. Cuneiform horoscopes contain few predictions or interpretative comments beyond occasional brief notes like the statement ‘things will be good for you’ in the fifth-century example above. A few tablets include more details of interpretative schemes or procedures, but there are no surviving theoretical texts which set out the overall interpretative framework of Babylonian horoscopy.¹⁰⁴ It is likely, however, that the basic principles go back to the celestial omen tradition, since the ominous phenomena are the same and the predictive comments which do occur closely resemble the

¹⁰² Rochberg-Halton 1989; Rochberg 1999; see also Steele 2011b: 339–40 (mathematical astronomy used for horoscopes in Uruk); Jones 2015a: 183–91.

¹⁰³ Rochberg 1999: 45–8.

¹⁰⁴ Tablets which contain interpretative or procedural information include the horoscopes MLC 1870 and 2190 (Rochberg 1998 nos. 5 and 10 respectively), *TCL* 6, 14, which describes various procedures relating to horoscopy, and *LBAT* 1593, edited by Reiner 2000, which offers predictions for individuals born under different zodiac signs, including their physical characteristics.

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apodoses of birth omens: predictions for an individual's life formulated in the 'If X, then Y' pattern of traditional omen divination.¹⁰⁵

As these links between horoscopes and birth omens suggest, there was a close relationship between the older and newer forms of celestial prognostication. While scholarly activity on *Enūma Anu Enlil* declined as zodiacal astrology took off, the series continued to be copied and studied until the end of the cuneiform record, often by scholars who were also practitioners of the newer forms of celestial inquiry. For example, Anu-aba-utēr of Uruk, whom we have already met as an owner/scribe of tablets containing mathematical astronomy and zodiacal astrology, also wrote a commentary on two tablets of *Enūma Anu Enlil*.¹⁰⁶ Some late astrological texts also combine elements of the 'old' and 'new' traditions. For example, a tablet from Babylon written in the Achaemenid or Hellenistic period contains lunar eclipse omens which are phrased in the style of *Enūma Anu Enlil* but specify the location of the planets in the zodiac, and planetary positions in the zodiac also appear on a tablet from Hellenistic Uruk which combines aspects of state and birth astrology.¹⁰⁷ The astrological geography of the Late Babylonian period which links zodiac signs or constellations with countries or cities can also be traced back in a general way to the association of different celestial regions or phenomena with particular terrestrial zones in *Enūma Anu Enlil*.¹⁰⁸ Even the horoscopes are not as distant from the *Enūma Anu Enlil* tradition as they appear at first glance. Although they are not formulated using the conditional phrasing of celestial omens, their format and contents suggest that, as Rochberg puts it, 'the situation of the heavens at the moment of birth would be read more or less as an omen'.¹⁰⁹ All this confirms the conceptual congruence between omen divination and zodiacal astrology, and suggests that the older form of celestial divination still attracted more

¹⁰⁵ Koch-Westenholz 1995: 172–6; Rochberg 1998: 13–16.

¹⁰⁶ Cf. n.10; *EAE* commentary: VAT 7813.

¹⁰⁷ BM 36746 (Rochberg-Halton 1984); *TCL* 6, 13 (Rochberg-Halton 1987).

¹⁰⁸ On Mesopotamian astrological geography, see Weidner 1963; Hunger 2004; Steele 2015b.

¹⁰⁹ Rochberg 2010a: 4.

than merely antiquarian interest in the final centuries of cuneiform scholarship.

2.3.3.2 *A Cross-Cultural Conceptual Divide?*

Before examining the elements of Greek astrology which originated in a Mesopotamian context, we must address a frequently mentioned difference between the conceptual frameworks of the two astrological systems. While Mesopotamian astrology was originally predicated on the idea that celestial phenomena were divinely provoked signs which did not in themselves *cause* the events they predicted, Greek astrology operated on the basis of a physical model derived from Aristotelian cosmology whereby the Sun, Moon and planets were thought to exert direct influence on the sublunar world as they revolved around the Earth. According to this model, each celestial body caused terrestrial effects in accordance with its specific nature by transmitting radiation through the aether, the element filling the spheres in which they moved. These effects were modified further by the interactions of different celestial bodies with each other and with the regions of the zodiac through which they passed, which were also thought to have particular properties and produce particular effects.¹¹⁰ Some modern scholars have seen a sharp conceptual divide between Mesopotamian and Greek astrology here; David Pingree even distinguished between all forms of Mesopotamian ‘celestial divination’ on the one hand, and ‘astrology’ on the other, which, defined in terms of the physical model of stellar and planetary influence, began only with the Greeks.¹¹¹

If this divide is absolute, it indeed represents a crucial difference between celestial prognostication in Mesopotamia and the Graeco-Roman world. Yet it may be less stark than is sometimes claimed. First, we may note the lack of any such category distinction by Greek and Roman writers, who certainly see themselves as working within the framework of Chaldaean *astrologia*. More significantly, there is evidence

¹¹⁰ For summaries of the physical/philosophical background to Greek astrology, see Bouché-Leclercq 1899: 72–87; Barton 1994: 102–13.

¹¹¹ Rochberg-Halton 1988a: 62; Rochberg-Halton 1984: 116–18; Koch-Westenholz 1995: 20–1; Pingree 1997: 21–9.

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from both Greek and Mesopotamian sources that undermines a cast-iron distinction on conceptual grounds. On the one hand, the reading of celestial phenomena as signs is not absent from Greek astrological sources, particularly the earlier ones. For example, Diodorus in his discussion of Chaldaean astrology speaks of the planets as interpreters of divine will which ‘indicate future events’ (τὰ μέλλοντα γίνεσθαι δεικνύουσιν); the use of the verb *deiknuo*, ‘point out’, suggests a relationship of signification. With no evident dissonance, he then switches two sections later to the language of causation familiar from later Greek astrology, describing them as the ‘celestial bodies which exert the greatest influence for good and evil on human births’ (πλεῖστα δὲ πρὸς τὰς γενέσεις τῶν ἀνθρώπων συμβάλλεσθαι τούτους τοὺς ἀστέρας ἀγαθὰ τε καὶ κακὰ).¹¹² The fully developed theory of astral influence found in Ptolemy should not, therefore, be taken as representative of Greek astrology from its inception, particularly since, as is increasingly clear, Ptolemy’s own astrology was far from ‘mainstream’.¹¹³

In fact, even the *Tetrabiblos* includes sections where the relationship between celestial phenomenon and terrestrial event is one of symbolic signification. For example, when Ptolemy states that the colours which accompany eclipses ‘are signs of’ (σημαντικὰ γίνεται) effects associated with the different planetary natures, the relationship of the colour to the event is that of sign not of cause.¹¹⁴ The discussion of comets which follows this passage offers a neat combination of cause and signification: while the comets in themselves ‘are naturally productive of’ (ἀποτελεστικὰς μὲν φύσει) wars, heat and chaos, they ‘indicate’ (δηλούσας) through their shape and position the type of event and the region it will affect.¹¹⁵

The picture in Mesopotamia is also more complicated than it at first appears. While it is true, as Rochberg observes, that there is no explicit evidence for a physical model of celestial influence in astrological texts, texts of other genres suggest a conception of direct stellar influence.¹¹⁶ Akkadian medical recipes which call for medicine to be left ‘under the stars’ or placed ‘in front of’ a certain

¹¹² Diod. Sic. 2.30.4–31.1. ¹¹³ Holden 2006: 44–51; Heilen 2010: 77.

¹¹⁴ Ptol. *Tetr.* 2.10.1. ¹¹⁵ Ptol. *Tetr.* 2.10.3.

¹¹⁶ Rochberg 2004: 293–4; Rochberg 2008: 25.

star overnight before being administered seem to presuppose a model of stellar irradiation, while statements about diseases ‘coming down from’ planets or stars also imply that the heavenly bodies could exert a physical effect on the human world.¹¹⁷ As Nils Heeßel points out, this idea also follows naturally from the fact that in Mesopotamia the Sun, Moon and planets were each associated with a deity; since the gods were responsible for sending diseases (one could fall ill by being ‘touched by the hand of’ a god) it was natural that this power should extend to their cosmic aspects.¹¹⁸ Exactly how the relationship between god and heavenly body was imagined is still not fully understood: in some representations the planets seem to be identified directly with the deity; in others they are envisioned as their agents or tools. Yet the existence of any link between the celestial bodies and the gods, who *were* definitely believed to exert direct physical effects on Earth, invites caution about the idea that Mesopotamian astrology lacked a physical basis altogether.

This caution is especially warranted for later periods. Although the idea that ominous celestial phenomena are divine messages rather than causative agents is clearly articulated in the celestial omen tradition, it would be unwise to assume that the conceptual underpinnings of Mesopotamian astrology remained completely static for nearly two millennia. In fact, certain Late Babylonian texts relating to astrological medicine seem to imply a relationship of influence between celestial and terrestrial phenomena. The so-called plant, stone, tree texts from Babylon and Uruk associate different zodiac signs with various *materia medica* for therapeutic purposes, while one cuneiform tablet from Babylon recommends remedies for afflicted body parts which have been ‘touched’ by certain stars.¹¹⁹ All this suggests that the relevant zodiac signs and celestial bodies were thought to have a particular power or property. As all the relevant texts are of Seleucid or Parthian date this could in theory be the result of Greek influence, but given the Babylonian precedents for stellar irradiation it is equally likely to

¹¹⁷ Reiner 1995: 48–60; Heeßel 2008: 2–5. ¹¹⁸ Heeßel 2008: 2–3.

¹¹⁹ Heeßel 2008: 9–14 (the tablet containing remedies for parts of the body ‘touched’ by stars is BM 56605, originally published in Heeßel 2000: 112–30). On the ‘stone, plant, tree’ texts see further page 80.

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represent an internal development, or, indeed, a combination of the two.¹²⁰ On the present state of the evidence, therefore, it seems unwise to posit too sharp a division between Mesopotamian and Greek astrology in terms of the underlying theoretical framework.

2.3.3.3 *Mesopotamian Elements in Greek Astrology*

Despite the long history of celestial divination in Mesopotamia, both older and newer forms of Mesopotamian astrology seem to have found their way into Greek astrology during the last few centuries BC. Some knowledge of Babylonian celestial omens had already reached Egypt in the Persian period: a Demotic text from the sixth or fifth century BC which is preserved on a Roman period papyrus contains eclipse omens of Babylonian origin.¹²¹ It is therefore possible that some omen astrology had also travelled further west by this date, but the earliest concrete evidence for the transmission of both types of Babylonian astrology to the Greek world is Hellenistic. Elements of both are combined in Hellenistic Greek astrology, and in our earliest statements from Greek practitioners about what Chaldaean *astrologia* entailed: as we have seen, Theophrastus supposedly admired their forecasts of both ‘general’ and ‘individual’ fates, neatly linking together in a single sentence the state astrology of the *Enūma Anu Enlil* tradition with the individual predictions of zodiacal astrology.¹²² Nonetheless, for the sake of clarity we will discuss each form in turn here.

Enūma Anu Enlil Astrology

There are no translations of or references to the series *Enūma Anu Enlil* by Greek or Latin authors. However, elements of traditional Babylonian omen astrology appear in various Greek astrological texts, particularly those dealing with ‘general’ or ‘universal astrology’, which predicted the fortunes of entire peoples and countries. A number of parallels with *Enūma Anu Enlil* have been detected in fragments of Greek astrological texts attributed to two probably pseudonymous Egyptian figures, Nechepso and Petosiris.¹²³ These works, which were probably written in Egypt

¹²⁰ Greek influence is proposed by Pingree 1997: 28. ¹²¹ Parker 1959.

¹²² Procl. *In Ti.* 3.151.2–9 (= Theophr. Fr 194 *FHSG*).

¹²³ On Nechepso and Petosiris, see Greenbaum and Ross 2012, with bibliography.

in the second or first century BC, survive via quotations in treatises by Hephaestion of Thebes (ca. fifth century AD) and John of Lydia (ca. sixth century AD). They contain omens which parallel *Enūma Anu Enlil* closely in terms of the phenomena they treat as significant, and sometimes also in their formulation.¹²⁴ A more general correspondence with the *Enūma Anu Enlil* tradition (and an explicit attribution to Babylonia) can be found in Diodorus; his list of natural phenomena on Earth which according to the Chaldaeans were presaged by planetary movements summarises many of the correlations between celestial and terrestrial phenomena established in the series:

(The Chaldaeans) say that sometimes by their risings, sometimes by their settings, and by their colour, (the planets) indicate in advance what is going to happen, to those who are willing to observe them closely. Sometimes they indicate great windstorms, sometimes an excess of rain or heat, sometimes the appearance of comets, and also solar and lunar eclipses, and earthquakes, and in general all the conditions which are generated by the atmosphere and are beneficial or harmful, not only to entire peoples or regions, but also to kings and private individuals.¹²⁵

The section on general astrology in Ptolemy's *Tetrabiblos* also displays many parallels with *Enūma Anu Enlil*, in terms of both the phenomena chosen for observation and the schemata according to which they are classified and interpreted. For example, when Ptolemy describes the features of eclipses which are of ominous significance in general astrology, the working principles go back to the *Enūma Anu Enlil* tradition:

For predicting general conditions one must also observe the colours relating to eclipses – either those of the luminaries themselves, or those of the formations that occur around them, such as rods, haloes, or similar. If they appear black or greenish they signify the effects which were mentioned in relation to the nature of Saturn; if white, of Jupiter; if reddish, of Mars; if yellow, of Venus; if variegated, of Mercury.¹²⁶

¹²⁴ Many parallels were collected by Bezold and Boll 1911; Misiewicz 2016 offers a nuanced reexamination of lunar omens in John of Lydia's *De Ostentis*, rejecting some of Bezold and Boll's parallels but confirming that John drew on a tradition containing elements derived from Mesopotamian celestial omen divination.

¹²⁵ Diod. Sic. 2.30.4–6. ¹²⁶ Ptolemy, *Tetrabiblos* 2.10.1.

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Colours and atmospheric phenomena like haloes feature prominently in the eclipse omens of *Enūma Anu Enlil*, and the range of colours specified by Ptolemy mirrors almost exactly that of the series. Compare for example the following lunar eclipse omens from Tablet 16 of *Enūma Anu Enlil*:¹²⁷

If an eclipse occurs on the 14th of Du'ūzu and is white: Sin will [request] votive offerings.

If an eclipse occurs on the 14th of Du'ūzu and is black: the angry gods will return to the land.

If an eclipse occurs on the 14th of Du'ūzu and is red: the fields and meadows [will be flooded].

If an eclipse occurs on the 14th of Du'ūzu and is yellow: the enemy will [plunder] the property of the land.

If an eclipse occurs on the 14th of Du'ūzu and is variegated: in the land of Akkad the market rate [will fall].

The precise parallels between the features treated as ominous by Ptolemy and *Enūma Anu Enlil* confirm beyond doubt the Babylonian origin of the tradition represented in this section of the *Tetrabiblos*. At the same time, the content and format of the predictions are different. The association of the colours with planetary 'natures' in Ptolemy's account, for instance, is unparalleled in the cuneiform sources. This highlights the ways in which, as in astronomy, Mesopotamian astrological concepts and methods were adapted and developed in new directions in the Graeco-Roman world.

Zodiacal Astrology

The evidence for Greek use of Babylonian zodiacal astrology follows a similar pattern and chronological distribution to that of omen astrology. Some awareness of Babylonian genethliology may have existed in the fourth century BC: we have seen that Eudoxos knew of the zodiacal constellations, and according to Cicero, he opined that 'no faith at all should be placed in the Chaldeans when it comes to their practice of predicting and describing anyone's life based on the day of his birth'.¹²⁸ Once again, however, the bulk of the evidence is later. A possible third-century link comes with the

¹²⁷ *EAE* 16 IV.6–10 (edition from Rochberg-Halton 1988c: 94–5; my translation).

¹²⁸ Cic. *Div.* 2.42.

early Stoics. Our source is again Cicero, who claims that Chrysippus of Soli wished to convince diviners to reformulate ‘if X, then not Y’ predictions as ‘it is not the case that both X and Y’, using as an example the prediction ‘If someone was born when Sirius was rising, he will not die at sea’.¹²⁹ David Pingree has connected this with a birth omen on a tablet from Seleucid Uruk which states ‘(If someone is born) in the sign of the Crab, death at sea’.¹³⁰ The similarity of the prediction cannot bear too much significance: death at sea is a sufficiently common event that different cultures could be expected to generate predictions about it independently. But the overall parallelism in form and content renders a Babylonian background at least plausible.

Moving to the second century BC, we might expect Hipparchus to be a key figure once again, but his connections to astrology are doubtful. Pliny’s approving pronouncement that Hipparchus did more than anyone to prove ‘the kinship of the stars with men’ is too general to be of much use, and the other sources linking him with astrological doctrines are scanty and late.¹³¹ Firmicus Maternus (ca. AD 280–360) associates Hipparchus with the concept of the *antiscion* or ‘shadow’: an astrologically significant point on the zodiacal circle opposite the location of a planet, along a line drawn parallel to the axis of the solstices or equinoxes.¹³² Around a century later, he is credited by Hephaestion of Thebes with a system of astrological geography very similar to that attested in Late Babylonian texts.¹³³ Overall, Neugebauer’s scepticism about Hipparchus’ astrological credentials seems the correct response, especially given the contrast with the strong tradition regarding Hipparchus’ use of Babylonian astronomical data and methods.¹³⁴

In the first century BC, Greek horoscopes begin to be attested. The earliest, if it does in fact represent a horoscope, may be a relief from the funerary complex of Antiochus I of Commagene on the summit of Nemrut Dağ in south-east Turkey. It depicts a star-studded lion with three planets above it and the crescent Moon on its chest. The placement of the stars indicates that they represent

¹²⁹ Cic. *Fat.* 15. ¹³⁰ *TCL* 6, 14 obv. 23; Pingree 1997: 23. ¹³¹ Pliny *HN* 2.95.

¹³² Firm. Mat. *Mathesis* 2. praef. 2; cf. Bouché-Leclercq 1899: 159–64.

¹³³ Heph. *Apotelesmatica* I 1, 7; 162 (ed. Pingree 1973b).

¹³⁴ Neugebauer 1975: 331–2.

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the constellation Leo, and the resulting astral configuration has been dated variously to 109, 60, 55 or 49 BC and associated with a number of possible events in Antiochus' life and reign.¹³⁵ Two horoscopes for 72 BC and 43 BC are preserved in much later literary texts, and the earliest Greek documentary horoscope (on papyrus) is dated to 10 BC.¹³⁶ The majority of the surviving Greek horoscopes come from the first five centuries AD, although as Neugebauer and Van Hoesen note, this largely reflects the distribution of papyrus finds.¹³⁷

In contrast to the small number of cuneiform horoscopes so far known from Babylonia (28), around 350 Greek horoscopes have been identified to date. This disparity may or may not be significant. Otto Neugebauer and Henry van Hoesen inferred that the differing ratios of horoscopes to astronomical texts in the two regions (low in Babylonia; high in the Graeco-Roman world) reflected the relative popularity of horoscopy and astronomy.¹³⁸ However, it is probable that many more Babylonian horoscopes circulated on perishable media, either in cuneiform or, more likely at this period, Aramaic. Horoscopes were probably also visualised in a temporary manner by practitioners, perhaps using astrological boards like those recovered from several Greek and Roman sites. Here the zodiac circle and its various subdivisions were drawn on the board, and markers made from stones or gems would be placed in the relevant zones on the board to represent the horoscope.¹³⁹ The few surviving boards are made from durable material (stone and ivory), but it is likely that more

¹³⁵ 109 BC: Crijns 2002 (also proposed in unpublished work by Eugene Milone and Byron Desnoyers Winmill, cited in Belmonte and González García 2010: n.10); 60 BC: Neugebauer and Van Hoesen 1959: 14–16 (suggesting this is a 'horoscope' for the date when the Romans confirmed Antiochus' rule over Commagene); 55 BC: Tuman 1984, who argues (less persuasively) that the relief represents a planetary alignment on Antiochus' birthday; 49 BC: Belmonte and González García 2010.

¹³⁶ Neugebauer and Van Hoesen 1959: 161. For editions of Greek horoscopes, see Neugebauer and Van Hoesen 1959 with the addition of Baccani 1992; Jones 1999c Vol I: 249–295; Vol II: 372–446; de Jong and Worp 1995; de Jong and Worp 2001. An updated catalogue of all ancient horoscopes (including Babylonian and Demotic Egyptian) can be found in Heilen 2015: 204–333.

¹³⁷ Neugebauer and Van Hoesen 1959: 161–2.

¹³⁸ Neugebauer and Van Hoesen 1959: 162.

¹³⁹ On astrologers' boards and markers, see Evans 2004: 4–24; Forenbaher and Jones 2011.

ephemeral materials were often used: wood, papyrus or even temporary drawings in sand or mud.¹⁴⁰ The contrast between the ‘popularity’ of horoscopy in Babylonia and the wider Hellenistic world may therefore be more apparent than real.

In terms of basic format and content, Greek horoscopes are similar to the cuneiform examples: they record the positions of the Moon, Sun and planets in the zodiac at the time of birth, and sometimes other significant celestial phenomena.¹⁴¹ Like the Babylonian horoscopes, too, they contain very few predictive or interpretative comments; our knowledge of the conceptual framework comes from technical treatises, particularly the works of Geminus, Ptolemy, Vettius and Firmicus Maternus. But there are also important differences between Greek horoscopes and their Babylonian forerunners. The most significant is the *horoskopos* itself (lit. ‘hour-watcher’) from which the genre is named: the zodiac sign or point on the ecliptic rising in the eastern horizon at the time of birth (known in modern astrology as the ‘ascendant’), which is not attested in Babylonian astrology but came to be the dominant feature of Greek and Roman genethliology. In addition, Greek horoscopes list the planets in order of their distance from Earth (according to a geocentric model) or the order of the zodiac signs in which they are stationed, rather than following the Babylonian sequence which was based on their malefic or benefic nature.¹⁴² Nor have Babylonian antecedents been identified for many of the doctrines and associative schemes of Greek horoscopic astrology; these multiplied the interpretative possibilities for the horoscope by adding further astrologically significant configurations of signs and planets which modified the basic forecast derived from the positions of the celestial bodies at the time of birth.¹⁴³

A growing number of these doctrines and schemes *have*, however, been traced back to Babylonian astrology. One is the

¹⁴⁰ Evans 2004: 10. ¹⁴¹ Neugebauer and Van Hoesen 1959: 162–75.

¹⁴² Babylonian sequence: Rochberg-Halton 1988b; Greek sequences: Neugebauer and Van Hoesen 1959: 163–4.

¹⁴³ For a brief overview of the working principles of Graeco-Roman astrology, see Barton 1994: 92–102; the best in-depth study, although outdated in some respects, remains Bouché-Leclercq 1899.

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hypsoma, ‘exaltation’ (Lat. *altitudo*): in Greek astrology the location within the zodiac where a planet was thought to exert its greatest influence, for good or ill depending on its nature.¹⁴⁴ This location could be expressed simply as a zodiac sign, or more precisely as a specific point on the ecliptic within a sign: for instance, Ptolemy gives the *hypsoma* of Mars as the sign Capricorn, while Firmicus Maternus assigns it to Capricorn 28°. ¹⁴⁵ Firmicus states that the Babylonians called the zodiac signs in which the planets had their exaltations their ‘houses’, *domicilia*, and as demonstrated by Ernst Weidner, the Greek *hypsoma* can be traced back to the Babylonian *bīt niširti* or *ašar/qaqqar niširti*, ‘secret house’ or ‘secret place’ (literally ‘house of the secret’ or ‘place of the secret’).¹⁴⁶

The Babylonian ‘secret houses/places’ go back originally to pre-zodiacal omen astrology, where they refer to particular constellations. The planetary omens of *Enūma Anu Enlil* predict positive outcomes when Venus reaches its ‘secret place’ and negative when it fails to do so, while the royal inscriptions of the Neo-Assyrian king Esarhaddon (r. 681–669 BC) mention Venus and Jupiter reaching their ‘secret places’ among other auspicious omens which marked the beginning of his reign.¹⁴⁷ Cuneiform astrological texts from the Hellenistic period, including some horoscopes, make reference to the *bīt niširti* of the Sun, Moon and planets, by this time apparently conceived as zodiacal signs.¹⁴⁸ A few tablets from this period contain drawings of what seem to be the planets in their secret houses (although they are not labelled as such).¹⁴⁹

Where the location of the *ašar/bīt niširti* can be identified, there is close alignment with the Greek *hypsoma*: we have

¹⁴⁴ Bouché-Leclercq 1899: 193–9. ¹⁴⁵ Ptol. *Tetr.* 1.20.5; Firm. Mat. *Mathesis* 2.3.5.

¹⁴⁶ Firm. Mat. *Mathesis* 2.3.4, 2.3.6; Weidner 1913: 208–12; Weidner 1919; cf. Rochberg-Halton 1988a: 53–7. It is not certain whether the logogram KI in *ki niširti* should be read as *ašar* or *qaqqar* (Rochberg-Halton 1988a: 53 n.13).

¹⁴⁷ The relevant *EAE* omens are listed in Rochberg-Halton 1988a: 54–5. Esarhaddon: *RINAP* 4.57 ii.4–5 (Venus); *RINAP* 4.48 rev. 55–7; 104 ii.39–40; 105 iii.15–17; 116 rev. 4 (Jupiter).

¹⁴⁸ Rochberg-Halton 1988a: 55–6.

¹⁴⁹ Weidner 1919; Weidner 1967: 8–11 (Koch-Westenholz 1995: 166 is sceptical about some of the identifications). If these drawings are to scale and the bar underneath indicates 1 degree units, as argued by Wee (2016: 161), they suggest that the Babylonian *bīt niširti* could also be a point on the ecliptic rather than a sign.

explicit statements that the *bīt niširti* of Mercury is Virgo (*hyp-soma* = Virgo 15°); that of the Sun, Aries (*hyp-soma* = 19° Aries); that of the Moon, Perseus or Taurus (*hyp-soma* = Taurus 3°), and that of Mars, Capricorn (*hyp-soma* = Capricorn 28°).¹⁵⁰ In addition, a Seleucid period planetary text provides indirect evidence for Venus' *bīt niširti* as Pisces (although an *Enūma Anu Enlil* commentary identifies it as Leo), that of Jupiter as Cancer, and that of Saturn as Libra (*hypsomata* Pisces 27°, Cancer 15° and Libra 21° respectively).¹⁵¹ The overall astrological significance is also similar, insofar as the *bīt niširti* and *hyp-soma* both magnify the qualities associated with the planet. It should be noted that Francesca Rochberg and Ulla Koch-Westenholz regard the Babylonian *bīt niširti* as a celestial location where a planet's appearance was always propitious, in contrast to the *hyp-soma* whose positive or negative significance depended on the nature of the planet.¹⁵² However, all the explicit evidence for the *bīt niširti* being a positive sign relates to benefic planets; it is therefore likely that when a malefic planet reached its *bīt niširti* this was a negative sign, and that the Babylonian concept was in fact closer to that of the Greek *hyp-soma* than the current state of the evidence suggests.¹⁵³

Yet there are still significant differences between the Babylonian and Greek concepts. Most importantly, while a planet in its *bīt niširti* was a powerful sign, a planet in its *hyp-soma* directly exerted powerful influence on the terrestrial sphere. Ptolemy even offers a physical explanation for the location of the *hypsomata* which finds no

¹⁵⁰ An apparent exception are the cuneiform horoscopes: in the six cases which specify that the child is 'born' (*alid*) in the *bīt niširti* of a given planet neither that planet nor, in most cases, any of the other heavenly bodies were in the relevant zodiacal sign at the time of birth (Rochberg 1998: 46–50). However, it is not clear what it means for a child to be born 'in' the secret house. David Pingree suggested that this may be connected with the sign of the Moon at conception rather than birth (pers. comm. cited in Rochberg 1998: 49 n.56), but the use of the stative *alid* (from (w)*alādu* 'give birth, bear') to mean 'conceived' is to my knowledge not otherwise attested.

¹⁵¹ Rochberg-Halton 1988a: 56.

¹⁵² Rochberg-Halton 1988a: 53; Koch-Westenholz 1995: 135.

¹⁵³ As seems to have been assumed by Weidner 1967: 10: 'Ihre Macht ist dann am größten und ihr Einfluß am stärksten'. Further implicit support may come from the fact that the six horoscopes which mention the *bīt niširti* all feature benefic planets (Venus, Jupiter and Mercury); it is likely that positive signs would be emphasised in these optional additions to the horoscope.

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counterpart in the Babylonian texts: for example, Mars is fiery, and hence becomes most fiery and strongest in Capricorn which is the southernmost point of its orbit (since the south is associated with heat).¹⁵⁴ In Greek astrology the *hypsoma* was also complemented by the *tapeinoma* or ‘depression’ – the point 180 degrees opposite on the zodiacal circle, where a planet’s influence was weakest – for which there is as yet no evidence of a Babylonian precursor.¹⁵⁵

Another way of increasing the interpretative complexity of horoscopes was through subdivisions of the zodiac signs, which could then be linked in various ways with the planets and luminaries so as to modify their influence. Two of the three main zodiacal subdivisions used in Greek astrology have been traced back to Babylonia: the Terms (*horia*) and the *dodekatemoria* (the third, the decans, originated in Egypt).¹⁵⁶ The Terms are subdivisions of each sign into segments of varying size which, using one of a number of schemes, are then assigned to one of the planets (and in some systems also the Moon and Sun) as ‘ruler’ or ‘lord’, so that each planet has rulership of one term per sign (Figure 2.3).¹⁵⁷ When a planet was in its Terms it was thought to have greater influence than usual (again, good or bad according to its nature), and the Terms were also used to calculate the life expectancy of individuals.¹⁵⁸ A number of systems of Terms were known to the authors of Greek astrological treatises, although only one, which Ptolemy calls the ‘Egyptian’ system, is utilised in the papyrological horoscopes recovered to date.¹⁵⁹

The Terms begin to appear in Greek astrological sources in the first century AD. References to them occur in documentary horoscopes from AD 46 onwards, while the first securely datable literary source is Dorotheus of Sidon’s astrological poem the *Pentateuch* (ca. AD 70).¹⁶⁰ Although Critodemus (first century AD) and Teucer

¹⁵⁴ Ptol. *Tetr.* 1.20.5. ¹⁵⁵ Bouché-Leclercq 1899: 192–9.

¹⁵⁶ On the decans, see Bouché-Leclercq 1899: 215–37; Neugebauer 1955a.

¹⁵⁷ Bouché-Leclercq 1899: 206–15; Jones and Steele 2011: section 1.

¹⁵⁸ Bouché-Leclercq 1899: 206–10.

¹⁵⁹ The various systems are outlined by Jones and Steele 2011: section 1. On Ptolemy’s treatment of the Terms and its later reception in antiquity and beyond, see further Heilen 2010.

¹⁶⁰ For a survey of Greek documentary and literary sources which use the Terms up to the fifth century AD, see Heilen 2010: 53–9.

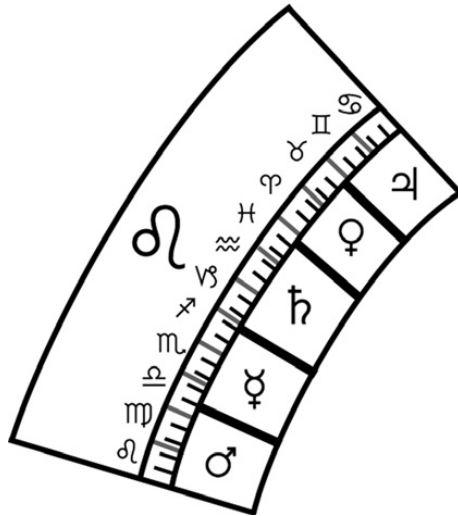


Figure 2.3 Terms and dodekatemoria of Leo

of Babylon (first century BC – first century AD) are credited with versions of the Terms by later writers, Dorotheus is the first to give a full explanation of the Terms.¹⁶¹ Based on Ptolemy’s attribution of one system of Terms to ‘the Egyptians’, and Porphyry’s mention of Petosiris as one of the ‘ancients’ who had a different system, it has been suggested that the earliest Greek sources for the Terms were the Hellenistic writings which circulated under the names of Nechepso and Petosiris.¹⁶²

There had long been speculation about a possible Babylonian origin for the Terms, not least because Ptolemy assigns one system to the ‘Chaldaeans’.¹⁶³ However, evidence from Babylonia was lacking until 2011, when lists assigning the planets to subdivisions of what seemed to be zodiac signs in a sequence matching the ‘Egyptian’ system of Terms were identified in two fragmentary Late Babylonian cuneiform tablets by Alexander Jones and John Steele.¹⁶⁴ Additional fragments subsequently revealed that the

¹⁶¹ Heilen 2010: 48 with n.28; 57.

¹⁶² Ptol. *Tetr.* 1.21.1; Porph. *Introductio in Tetrabiblum Ptolemaei* 41 (CCAG 5.4: 212); Heilen 2010: 46–7; Jones and Steele 2011: section 1.

¹⁶³ Ptol. *Tetr.* 1.21.1. ¹⁶⁴ Jones and Steele 2011.

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subdivisions are in fact of the schematic thirty-day month, but the one-to-one correspondence between the ideal 360-day calendar and the 360-degree zodiac means that the Terms could also have been understood as zodiacal subdivisions in Babylonia.¹⁶⁵ Nothing further is yet known about the meaning and uses of the Terms in Babylonian astrology, and they do not appear in the cuneiform horoscopes discovered to date.

A further subdivision of the zodiac in Greek astrology was the *dodekatemorion*. Here, again using one of several mathematical schemes, each zodiac sign was subdivided into segments which were then each assigned the name of a zodiac sign, creating a microzodiac within each sign.¹⁶⁶ As the name *dodekatemorion*, ‘twelfth-part’, implies, the subdivisions of the zodiac signs arising from these various mathematical schemes often resulted in twelve segments (of 2.5 degrees each), thus replicating the structure of the overall zodiac within each individual sign (as in Figure 2.3). However, five different methods existed for calculating *dodekatemoria*, two of which in fact result in thirteen microzodiac signs per zodiac sign; that is, one microzodiac sign will appear twice within each zodiac sign and the microzodiacs form a running series from one sign to the next.¹⁶⁷ The term *dodekatemorion* can refer either to a segment of a zodiac sign subdivided in this way, or to a specific point on the ecliptic associated by a mathematical scheme with another point where a planet is located.¹⁶⁸ For example, in Figure 2.3 the point Leo 2° is within the second zodiacal *dodekatemorion* of Leo (Virgo), but Leo 2° is the *dodekatemorion* of a planet located at Aries 11°, following a method used by Manilius, Dorotheus and Vettius Valens.¹⁶⁹ In Greek astrology

¹⁶⁵ Steele 2015a: 210.

¹⁶⁶ On the *dodekatemorion* in Greek astrology, see Hübner 2005.

¹⁶⁷ Hübner 2005: 198–217 (in practice these boil down to three methods, since A & B and C & D are functionally equivalent). As Wee points out (Wee 2016: 144), the scheme which creates a microzodiac of thirteen sections roughly represents the average motion of the Moon through the signs of the zodiac during the month (13 degrees per day).

¹⁶⁸ Hübner 2005: 191–8 helpfully disambiguates the various meanings of the term in antiquity.

¹⁶⁹ Hübner 2005: 200–1, 217 (Method C); Wee 2016: 144, 157–60. The formula is as follows: if a planet is located at a point I_1 on the ecliptic, its *dodekatemorion* may be found using the formula $I_2 = 12n + (0 \text{ degrees of original sign})$, where n is the longitude in degrees of I_1 . For a planet at Aries 11° one adds 132 (11 x 12) to Aries 0°, which is also 0° on the zodiac circle, ending up at 132°, which is Leo 2°.

the *dodekatemorion* could modify a planet's influence in various ways through the further associations created by the nature of the second zodiac sign with which it was linked.¹⁷⁰ Not all Greek and Roman astrologers used the *dodekatemoria*: Ptolemy was sceptical and omits finer zodiacal subdivisions than the Terms from consideration, but *dodekatemoria* appear fairly frequently in papyrus horoscopes.¹⁷¹

As Otto Neugebauer and Abraham Sachs were the first to recognise, the microzodiac schemes which produce the *dodekatemoria* originated in Babylonia, where their use is first attested in the late Persian or early Hellenistic period.¹⁷² Microzodiacs of twelve and thirteen sections were both used in Babylonia, where they seem to have had medical, hemerological and ritual applications.¹⁷³ The 'stone, plant, tree' texts, which we encountered earlier as possible evidence for a conception of stellar influence, contain tables which associate each microzodiac sign with plants, trees and stones (probably for medical purposes), a temple or city, and selected omens and hemerological prescriptions.¹⁷⁴ Similar are the Calendar Texts (*Kalendartexte*), which link days of the ideal 360-day year with points of the ecliptic using a scheme derived from the microzodiac of thirteen sections, and assign to each trees, plants, stones, animal parts and spells or ritual instructions.¹⁷⁵ A connection between the microzodiac and genethliology is also suggested by a cuneiform text from Hellenistic Uruk. This text gives instructions for creating the microzodiac of Aries, followed by a series of predictions which appear to forecast the life of the individual based on the microzodiac sign in which the birth takes place (e.g. '(If) in the sign of the Scales: good days; he will die (at) 40 years'); further birth omens follow on the reverse.¹⁷⁶

¹⁷⁰ Bouché-Leclercq 1899: 216 n.3; 299–303. ¹⁷¹ Ptol. *Tetr.* 1.22.

¹⁷² Neugebauer and Sachs 1952; Rochberg-Halton 1988a: 57–60.

¹⁷³ On the structure and applications of the different microzodiac schemes, see Wee 2016 (helpfully dispelling a number of confusions in previous scholarship).

¹⁷⁴ The first microzodiac tablets were noted by Sachs 1952: 71–3 and edited by Weidner 1967; see now, with expanded catalogue, Monroe 2016: 122–33.

¹⁷⁵ Weidner 1967: 41–9 with following notes by Van der Waerden; Brack-Bernsen and Steele 2004; Steele 2011b: 335–8; Wee 2016.

¹⁷⁶ *TCL* 6, 14 (microzodiac section obv. 6–26). There is no explicit link between the predictions and the previous section on the microzodiac, but the predictions follow the order of the microzodiac signs, with one per sign.

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The predictive possibilities of a horoscope could be augmented not only by subdividing the zodiac, but also by increasing the number of astrologically significant relationships between the zodiac signs, and hence between the celestial bodies passing through them. Another element of Greek horoscopic astrology with Babylonian origins falls under this heading: aspect, and in particular, *trine* aspect. In Greek astrology, aspects are angular relationships between the heavenly bodies in a horoscope, created by arranging the zodiac signs in a circle and linking them through various geometrical figures.¹⁷⁷ Ptolemy describes four aspects: sextile (hexagon; 60 degrees between planets), quartile (square; 90 degrees between planets), trine (triangle; 120 degrees between planets) and opposition (180 degrees; planets in opposite zodiac signs).¹⁷⁸ A fifth relationship, conjunction (0 degrees, i.e. two planets in the same zodiac sign) is not included in his classification but is treated as an aspect in the *Tetrabiblos* and other astrological texts. Figure 2.4 illustrates the four ‘triplicities’, groupings of three zodiac signs which are in trine (Aries, Leo, Sagittarius; Taurus, Virgo, Capricorn; Gemini, Libra, Aquarius; Cancer, Scorpius, Pisces), known in Greek astrology as ‘triangles’ (*trigōna*).

Whether an aspect relationship had positive or negative consequences for the horoscope depended on both the aspect and the planets involved. For instance, Ptolemy states that trine and sextile are positive since they involve signs of the same gender (Greek astrology classified signs as male or female), whereas quartile and opposition are disharmonious because they link signs of opposing genders.¹⁷⁹ A conjunction of benefic planets was positive; one of malefic planets was negative.

Although there are no explicit references to the theory of trine (or other aspect relationships) in cuneiform sources, Francesca Rochberg has shown that groupings of zodiac signs in triplicities do occur. In the Late Babylonian tablet which combines lunar eclipse omens with planetary positions in the zodiac, the eclipsed Moon and the planets Saturn and Mars are in trine aspect in each case.¹⁸⁰ The same tablet associates each of the four triplicities with

¹⁷⁷ Bouché-Leclercq 1899: 165–79; Barton 1994: 99–102. ¹⁷⁸ Ptol. *Tetr.* 1.14.

¹⁷⁹ Ptol. *Tetr.* 1.14. ¹⁸⁰ BM 36746; Rochberg-Halton 1984: 121–7; see page 65.

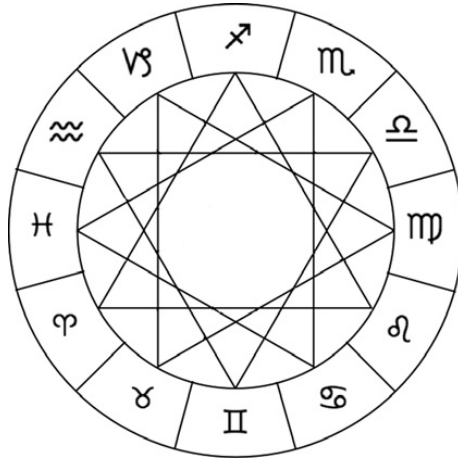


Figure 2.4 Trine aspect

one of the four winds, a relationship which also appears in later Greek astrology: Geminus mentions a ‘Chaldaean’ doctrine which correlates winds and triplicities in the same way.¹⁸¹ In Babylonia, the triplicities probably arose not from the geometrical relationships between zodiac signs envisaged by Greek practitioners, but from a calendrical scheme using the ideal 360-day year: a seventh-century commentary on *Enūma Anu Enlil* features a similar scheme based on the months of the year.¹⁸² This is another good example of both the continuities between Mesopotamian omen and zodiacal astrology and the ways in which Mesopotamian astrological concepts or schemes were adapted or reconceptualised in a Greek context.

Beyond horoscopy, a final area of Greek astrology where elements have been traced back to Babylonia is astrological medicine, or iatromathematics. Astrological medicine had a long tradition in Mesopotamia, but it is the medical zodiology of the Late Babylonian period which finds reflexes in the Graeco-

¹⁸¹ Geminus *Isagoge* 2.5–11.

¹⁸² Rochberg-Halton 1988a: 60. *TCL* 6, 13, a tablet from Hellenistic Uruk, contains a diagram of a subdivided circle which shows geometric relationships identical to trine but is labelled with month and planet names in a way which is difficult to interpret (Rochberg-Halton 1987: 226–8).

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Roman world.¹⁸³ In Greek and later western astrology zodiac signs and planets were linked to the human body in the doctrine of *melothesia*, whereby different body parts were thought to be subject to their influence.¹⁸⁴ Precursors to *melothesia* are traceable in cuneiform sources. An example of planetary *melothesia* was identified by Erica Reiner in a Late Babylonian medical commentary from Nippur which associates the spleen with Jupiter and the kidneys with Mars; the latter correlation is also found in Greek astrological texts, although Jupiter was typically associated with the liver in Greek and medieval astrology.¹⁸⁵ A tablet from Hellenistic or Parthian Babylon published by Nils Heeßel lists therapeutic procedures for parts of the body ‘touched’ by stars or constellations – a precursor to the associations between zodiac signs and body parts seen in Greek *melothesia*.¹⁸⁶ More recently, John Wee has demonstrated that the table on the reverse of this tablet reflects the concept of the ‘Zodiac Man’, a systematic correlation between zodiac signs and body parts which remained consistent over the centuries and formed a key constituent of medieval astrology.¹⁸⁷ Markham Geller has also speculated that an Achaemenid period tablet from Uruk which lists diseases associated with different body parts could represent a forerunner of zodiacal *melothesia*.¹⁸⁸ It is likely that as our understanding of Late Babylonian astrology grows, more connections will be discovered.

2.3.3.4 Transmission

As will be clear from the preceding survey, little can be said with confidence about exactly how and when Mesopotamian astrology reached the Greek-speaking world. In terms of time, once again the aggregate evidence points towards the second century BC as a *terminus ante quem*. The earliest Greek attestations of specific elements of Babylonian astrology come from the second or early

¹⁸³ For an excellent overview of astrological medicine in Mesopotamia, see Heeßel 2008.

¹⁸⁴ On *melothesia* in Greek astrology, see Bouché-Leclercq 1899: 76–7, 318–25, 521–3; Neugebauer 1959; Bezza 1995 II: 722–31, 741–4.

¹⁸⁵ Reiner 1993: 21; Reiner 1995: 59–60.

¹⁸⁶ Heeßel 2000: 112–30; further discussion in Heeßel 2008: 11–14. ¹⁸⁷ Wee 2015.

¹⁸⁸ Geller 2014b, esp. ch. 7. As there is no explicit mention of the zodiac in the tablet in question (*SpTU* 1, 43) this hypothesis remains unproven.

first centuries BC: the treatises attributed to Nechepso and Petosiris, and the work of Geminus. By the time most of the transmitted elements of Babylonian astrology are definitely attested in Greek sources – papyri from the first centuries BC and AD – they have already been integrated into new conceptual and technical systems, which suggests that these sources significantly postdate the original contacts. The lack of earlier papyrological evidence is probably due in part to the accident of preservation: most of the astrological papyri known to date are from Oxyrhynchus, where the level of the water table means that material older than the first century AD has rarely survived.¹⁸⁹

A definite *terminus post quem* for transmission is harder to establish, since the earliest references to Mesopotamian astrological praxis are relatively non-specific. Should Theophrastus' admiration for the Chaldaeans' prognostic abilities, for example, be taken as evidence that the methods of Babylonian genethliology were already well known in the Greek world in the late fourth and early third centuries, or does it simply indicate a general awareness of this Chaldaean art? The uncertain date or complicated transmission of the key literary sources exacerbates the problem: neither Geminus nor the fragments of 'Nechepso and Petosiris' can be securely anchored in time, nor is there any guarantee that all of the material attributed to the latter two figures goes back to a Hellenistic original. Implicit evidence for the middle rather than early Hellenistic period as the key period of transmission may come from the fact that both Diodorus and Geminus, writing in the first century BC, speak as if knowledge of Chaldaean astrology is still relatively new and they are among its first Greek interpreters; if these concepts had been circulating in the Greek world for two centuries already one might expect a different tone.

Of course, one need not envisage a single moment of transmission; *a priori* it is more likely that there were multiple contexts and vectors and that different elements travelled west at different times. Given the dependence of zodiacal astrology on the mathematical methods of Late Babylonian astronomy, it is probable that these

¹⁸⁹ Jones 1999c Vol I: 7.

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were transmitted together, while some aspects of omen astrology may have reached the Greek world separately, perhaps earlier. Elements which appear later in Babylonian sources, like the microzodiac, may have travelled west at a later date too: the use of the term *dodekatemorion* for microzodiac signs in Greek astrology might also imply that the simpler microzodiac of twelve sections came before the microzodiac of thirteen sections. At the same time, as many scholars have observed, the total number of borrowed elements is relatively restricted. Whether the overall timespan is long or short, we could be dealing with a small number of instances of transmission involving a few key contexts and individuals.

What were those contexts and who were those individuals? It is likely that Egypt was an important intermediary both before and after the Macedonian conquest. Mesopotamian concepts and methods appear in Hellenistic Greek sources already combined with elements of Egyptian astrology, while Greek and Latin authors erroneously attribute Mesopotamian doctrines to the Egyptians and vice versa, suggesting that much astrological knowledge reached the Greek world via Egypt. But the precise social and intellectual contexts which were key to this process are unknown. It is probable that the Egyptian temples, which had long been centres of native astrology, played a part. The Demotic papyrus containing eclipse omens which constitutes the earliest evidence of Mesopotamian omen astrology in Egypt probably comes from a temple context, while the appearance of zodiacs in temples and tombs from the second century BC onwards attests to the knowledge and importance of zodiacal astrology among the Egyptian priestly elite.¹⁹⁰ The temples were certainly centres of horoscopic astrology in Graeco-Roman Egypt, as presciently argued by Franz Cumont on the basis of the literary sources and subsequently confirmed by papyri and ostraca.¹⁹¹

The obvious alternative as a context for transmission in the Graeco-Roman periods – Alexandria – is less likely. Although

¹⁹⁰ Demotic papyrus: Parker 1959 (nothing is known of the original provenance but the most likely context for a Demotic scholarly text at this date is the temple). On the zodiacs in Egyptian temples and tombs, see Neugebauer and Parker 1960–9 Vol III 202–212; Neugebauer, Parker and Pingree 1982; Evans 2004: 24–6.

¹⁹¹ Cumont 1937; Jones 1994; Evans 2004: 24–7.

the Museum was a cosmopolitan centre for celestial scholarship from its inception, what is known of the Hellenistic period is predominantly concerned with astronomical observation and description: the work of Eratosthenes, Aristarchus and Conon in the third century, and in the second Hypsikles and perhaps Hipparchus (although the fact that one of the latter's reported observations was made in Alexandria is, as Peter Fraser observes, insufficient to claim with any confidence that he worked there).¹⁹² Although Fraser speculates about a Ptolemaic context for the work of 'Nechepso and Petosiris' and a handful of other late Hellenistic astrological texts, there is nothing to link them to the Museum or Library.¹⁹³ Unambiguous evidence for Alexandria as a centre for astrological scholarship comes much later, with Ptolemy, Vettius Valens and their successors. Moreover, as we will see in more detail in [Chapter 4](#), the Museum and Library do not seem to have been a major catalyst for cross-cultural interaction in any intellectual domain. Nor does the Ptolemaic court seem a likely hub. The celestial realm certainly played its part in Ptolemaic legitimisation, with Conon's recognition of the new constellation of the Lock of Berenice and its literary celebration in Alexandrian poetry.¹⁹⁴ But there is no evidence as yet that the new masters of Egypt were active patrons of *astrologia*.

Indeed, and perhaps surprisingly given its royal and imperial associations in Mesopotamia and later Rome, there is comparatively little to tie Hellenistic astrology to a royal context. Alexander the Great is reported to have had various interactions with the 'Chaldaeans': according to Diodorus they initially warned him not to enter Babylon due to a 'configuration of stars' which foretold his death, and he later regretted not listening to them when the omens of his impending demise became increasingly clear; Curtius describes how when Alexander did enter the city he was greeted by the Chaldaeans 'who were accustomed to explain the movements of the heavenly bodies and the appointed

¹⁹² Fraser 1972 I: 396–402 (Aristarchus and Conon); Fraser 1972 I: 414–15 (Eratosthenes); Fraser 1972 I: 423–5 (Hipparchus – with Vol II n.368 – and Hypsikles).

¹⁹³ Fraser 1972 I: 436–9.

¹⁹⁴ Call. Fr. 110 (ed. Pfeiffer); cf. Fraser 1972 I: 401, 729–30; Gutzwiller 1992; Clayman 2011.

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changes of the seasons'.¹⁹⁵ However, apart from a story in Appian that the 'magi' (presumably here Babylonian priests) 'falsified the hour' to try to prevent the building of Seleucia on Tigris (implying that they had been consulted by Seleucus as to the auspicious moment), there is no evidence that Alexander's Seleucid successors or their major rivals engaged with Babylonian celestial prognostication.¹⁹⁶ If the Nemrut Dağ lion relief does represent a horoscope then this places zodiacal astrology at one Hellenistic court, but in a minor kingdom, and late in the period.¹⁹⁷ It was later still and further west that personal astrology came into its own as both a tool for and shield against imperial power: in Rome, from Augustus' publication of his own horoscope to the false prediction of long life by which the astrol-oguer Thrasyllus supposedly prevented the paranoid Tiberius from executing a host of Roman nobles.¹⁹⁸

As for the vectors of transmission, a combined circulation of practitioners and texts seems most likely, but the evidence is exiguous. If Diodorus' use of 'the Chaldaeans say' were taken literally it might imply that Babylonian practitioners were active in the Mediterranean world in his day, but little weight should be placed on a turn of phrase, particularly since his erroneous attribution of the Egyptian decans to 'the Chaldaeans' reveals the limitations of his knowledge.¹⁹⁹ The specific figures linked in Greek and Latin sources to the Babylonian astronomical

¹⁹⁵ Diod. Sic. 17.112, 116 (cf. Plut. *Alex.* 73; Arr. *Anab.* 7.16.5–7; Curt. 5.1.19–23). On Alexander and the Chaldaeans see further pages 229–31.

¹⁹⁶ App. *Syr.* 58. Of the two potential counter-examples, Berossus' astrological and royal connections are questionable (see pages 109–17), while the Chaldaean Sudines who is associated with the Attalid court performs extispicy; see pages 232–5.

¹⁹⁷ For another suggested case of Hellenistic royal engagement with Babylonian astrology – at the court of Hyspaosines of Characene – see page 219.

¹⁹⁸ Augustus' horoscope: Suet. *Aug.* 94.12; Cass. Dio 56.25.5. Thrasyllus: Suet. *Tib.* 14. On astrology in imperial Rome, see Barton 1994: 32–63. There are Republican precursors. According to Plutarch, Gnaeus Octavius made the fatal decision to remain in Rome after being persuaded by 'Chaldaeans, sacrificers and interpreters of the Sibylline books', and a 'Chaldaean diagram' was found on his body (Plut. *Marius* 42.4–5); meanwhile, Sulla was told by a 'Chaldaean' in the retinue of the Parthian ambassador Orobazus that he would become the greatest man in the world, and recorded in his memoirs that 'the Chaldaeans' had predicted he would die at the height of his fortunes (Plut. *Sulla* 5.5–6; 37.1).

¹⁹⁹ Diod. Sic. 2.30.1–6.

material – Hipparchus, Sudines, Kidenas and Nabourianos – are associated only faintly with astrology, and not at all with horoscopy. As we have seen, Hipparchus’ connections to astrology are tenuous at best. Sudines is quoted as saying that Venus is a ‘destroyer of women’ in an anonymous astrological treatise from the third century AD, but he has no connections to zodiacal astrology, and no astrological doctrines are attributed to Nabourianos or Kidenas.²⁰⁰ The Babylonian who *was* later celebrated by Greek and Latin authors as a master of *astrologia* was Berossus, whose case will be discussed in [Chapter 3](#).

Whatever the status and ethnicity of the individuals who spread Chaldaean astrology across and beyond the Hellenistic world, the complexity of some borrowings suggests that, as with mathematical astronomy, written texts were sometimes involved. As Jones and Steele point out, the complexity of the Terms, with sixty subdivisions of the signs, is such that they were almost certainly transmitted with the aid of texts; the same is likely true for the *dodekatemoria* schemes.²⁰¹ It is also difficult to imagine the accurate transmission of aspect relationships or the various schematic associations between zodiac signs and geographical, meteorological or other phenomena without some recourse to tables, diagrams or lists.

2.4 Reciprocal Influence?

A final question which needs to be addressed is that of reciprocal influence. Did contacts between Babylonian and Greek scholars result in any Greek influence on Babylonian astronomical or astrological praxis? The question is particularly pressing where the earliest Babylonian evidence for a given element is Seleucid or Parthian and does not enjoy any significant chronological priority over the earliest Greek attestations; here the direction of influence could well be the other way around. Still, as yet there is very little evidence for Greek influence on Late Babylonian celestial scholarship, with a few suggestive exceptions. In the

²⁰⁰ Venus as destroyer of women: *P.Gen. inv.* 203; Hübner 1988.

²⁰¹ Jones and Steele 2011: Section 3.

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case of observational records the clear chronological priority in Mesopotamia combined with the lack of evidence for systematic Greek observational astronomy before the Hellenistic period is enough to afford certainty that the direction of transmission was from Babylonia to the Greek world. There is no evidence that the observational astronomy of the Late Babylonian period was influenced by Greek methods.

The same is true of the main arithmetical schemes of Babylonian mathematical astronomy, which developed too early to have come under Greek influence.²⁰² However, Dennis Rawlins, followed by several other scholars, has detected Greek influence in an unusual astronomical procedure text from first-century BC Babylon. This tablet contains a value for the number of days in 18 solar years; the estimated year-length on which it is based correlates poorly with the sidereal year typically used in Babylonian astronomy, but is a good estimate for the tropical year which was used by Greek astronomers.²⁰³ Furthermore, the estimate seems to have been derived using two similar solstice or equinox observations made 297 years apart: precisely the interval between the solstice observations made by Meton of Athens in 432 BC and Hipparchus in 135 BC which are recorded in Ptolemy's *Almagest*.²⁰⁴ The tablet also displays several atypical features of format and content, including a writing of month lengths which is typical of Greek rather than cuneiform astronomical texts.²⁰⁵ The case for Greek influence here is convincing, but so far this is the only example among the hundreds of surviving cuneiform astronomical texts, which suggests, as Steele concludes, that Greek influence on Babylonian astronomy was 'neither widespread, nor especially significant'.²⁰⁶

²⁰² Steele 2006b: 157 bis (no page 158).

²⁰³ Thurston 2002: 62; Steele 2006b: 157 bis.

²⁰⁴ Rawlins 1991: 49–54; Thurston 2002: 62; Britton 2002: 50–2; Steele 2006b: 157–157 bis.

²⁰⁵ Steele 2006b: 157 bis – 159.

²⁰⁶ Steele 2006b: 159. Rawlins 2002 has also argued that the Babylonian System B month length derives from Aristarchus; if correct this would represent significant Greek influence on Babylonian mathematical astronomy, but the suggestion does not seem to have found widespread acceptance.

When it comes to the astrological material the picture is less conclusive. Although the chronological priority of Mesopotamian omen astrology and the zodiac itself is clear, the first attestation of some elements of zodiacal astrology in Babylonia is late enough that in theory they could represent Greek influence. Proposed cases include the representation of the zodiac sign Aries as a ram in Hellenistic cuneiform texts and cylinder seals (the original Babylonian figure was ‘the Hired Man’);²⁰⁷ the *melothesia* texts; the assignment of gender to the planets; the idea that different zodiac signs influence different aspects of the native’s life; and elements of catarchic astrology (astrology concerned with business and other undertakings).²⁰⁸

There is something of a danger here of correlating innovation with foreign influence, and most of the suggested examples are equally explicable as internal developments. For example, the representation of the Hired Man as a ram can be explained through a type of punning common in Mesopotamian scholarship. Ungnad suggested already in 1941 that it came from an abbreviated logographic writing of the Hired Man (MUL.LÚ. HUN.GÁ) as MUL.LÚ and then the homophonous MUL.LU: while LÚ means ‘man’, LU can be read as UDU, the logogram for ‘ram’ (Akkadian *imмерu*); his theory has been confirmed by a recently published Akkadian text which explains the writing MUL.LU in exactly this way.²⁰⁹ The *melothesia* texts are a similar case: the links between particular zodiac signs and body parts can be seen as a natural outgrowth of the pre-existing tradition that particular gods and celestial bodies cause specific diseases, and parallel to correlations between body parts and ominous phenomena in other branches of Mesopotamian divination. The same sort of arguments can be extended to the other suggested borrowings from the Greek world, and even

²⁰⁷ Reiner 1995: 117; Wee 2016: 180; for the cylinder seal representations, see Wallenfels 1993a: 282–3.

²⁰⁸ Pingree 1997: 28.

²⁰⁹ Ungnad 1941: 256 n.37; Steele 2006b: 156–7; on MUL.LU or MÚL.LU as writings for Aries, see also Sachs 1952: 71 with n.51; on homophonic substitution in Seleucid texts see also Foxvog 1993: 107 n.18. New tablet: Beaulieu *et al.* 2018. A complementary driver for the change was the identification of the Hired Man with Dumuzi, the shepherd-god (Wallenfels 1993a: 282–3; Foxvog 1993: 106–7).

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where there is no Babylonian precursor one should not eliminate the possibility of complete innovation. Ultimately, then, there is as yet no definite case of Greek influence on Mesopotamian astrology.

Celestial scholarship was one of the most powerful and lasting legacies of ancient Mesopotamia. The observations, predictive methods and astrological concepts which were transmitted from Babylonia to the Greek world provided some of the fundamental underpinnings for western astronomy and astrology. Some, like the zodiac, the use of the degree for celestial measurement and horoscopes, have survived to the present. Although nearly all knowledge about the civilisations of ancient Mesopotamia was lost for two millennia after the end of cuneiform, the shapes and creatures they saw in the heavens endured; in a meaningful sense we are still looking at their night sky today.

In terms of the intellectual history of the Hellenistic period, the study of the heavens is a vital example of cross-cultural exchange. It shows that intense and lasting contacts took place between Greek and Babylonian scholarship, offering an important counterweight to the impression of cultural isolation conveyed by the cuneiform tablets from Babylonia, and reminding us that this impression may be due to the partial nature of the textual record. It also illustrates the scope for cross-cultural narratives in Hellenistic intellectual history: a full study of Hellenistic astral science which pursued the connections between Mesopotamian, Egyptian, Greek and Indian traditions would offer an important complement to the Hellenocentric picture that tends to emerge from the typical focus on Alexandrian poetics and textual criticism, Athenian philosophy or Pergamene glossography as characteristic of 'Hellenistic' intellectual life. Yet the case of celestial scholarship also illustrates the limitations of our knowledge about these cross-cultural interactions. Although it is easy to determine that cross-cultural contacts occurred, it is much more difficult to establish precisely when, or how, to reconstruct the contexts of transmission and the individuals and objects which constituted the crucial vectors. While the wide sweep of the history of

ideas is clear, our narratives persistently falter once they reach the human level: the specific moments, places, communities and people through which the complex intertwining vividly imagined by Pingree came about.

This lack of contextual specificity is problematic for the writing of Hellenistic intellectual history in two ways. First, it makes it hard to determine what, if anything, is particularly ‘Hellenistic’ about these intellectual exchanges, i.e. what beyond the simple fact of increased contact between Greeks and Babylonians led to cross-cultural exchange in this particular domain and in these particular forms. More generally, the level of abstraction to which we are forced to resort in tracing the transmission of celestial doctrines often gives us a limited sense of intellectual life *in* the Hellenistic world and the kind of cross-cultural interactions that could and did take place. Identifying precursors to trine aspect in cuneiform sources and *Enūma Anu Enlil* omens in Ptolemy’s *Tetrabiblos* tells us little about why scholars in Greece and Babylonia engaged with the heavens in the ways they did, how their work was related to both their local context and the imperial systems in which they lived and worked, and how and why they came into contact with one another.

The surviving evidence offers a great deal of scope for fruitful speculation – that Hipparchus was the main conduit for Babylonian observations while arithmetical astronomy was fully explicated by later scholars; that Kidnās and Sudines were members of the priestly elite at Esagila who one day packed up their styluses and travelled west; that Rhodes was a key site for the transmission of Babylonian celestial scales of measurement to the Greek world. But such speculations offer few certainties, and generate further questions: how exactly would someone like Hipparchus or Kidnās negotiate the linguistic and cultural divides between Greek and Mesopotamian scholarship? Did Greeks learn cuneiform or did members of the Babylonian elite translate their work into Greek, and in either case, how did they acquire knowledge of the relevant language and script? Beyond basic linguistic competence, what opportunities were there for Greeks and Babylonians to gain acquaintance with each other’s intellectual traditions? In order to

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pursue these questions further, we must move from the disembodied chasing of ideas to the work of a single individual, and from some of the most technically complex intellectual products of the Hellenistic world to the faltering efforts of beginners. In short, we must come down to earth.

BEROSSUS AND THE GRAECO-BABYLONIACA

The transmission of Mesopotamian astronomy and astrology to the Greek world and subsequent transformation of many of the constituent elements indicates that contacts between Hellenistic Babylonian and Greek scholarship occurred at a high level of intellectual complexity, over a sustained time period, and probably involved a combination of oral and textual transmission. At the same time, the surviving astronomical and astrological sources afford little information about how these contacts played out in relation to any individual context or practitioner.

By contrast, our next two points of contact draw our focus down from the cosmic canvas of celestial movements to the terrestrial zone of their human interpreters, allowing us to examine the interplay of different cultural and linguistic traditions in the work of individuals. The first case is Berossus, a priest from Hellenistic Babylon who wrote a three-book work in Greek entitled *Babyloniaca*. Second are the so-called Graeco-Babyloniaca, clay tablets from Hellenistic or Parthian Babylon which contain Sumerian and Akkadian school texts inscribed in cuneiform on one side and transcribed using the Greek alphabet on the other. These cases are very different in kind. The former presents us with cross-cultural engagement at a high level of intellectual sophistication in the work of a Babylonian who was known by name to later Greek and Roman writers, while the latter take us to the other end of the intellectual spectrum with the basic exercises of anonymous students in Babylon. Nonetheless, they are parallel insofar as they illustrate how the kind of cross-cultural contacts which ultimately resulted in the transmission of Babylonian astronomical and astrological doctrines to the Greek world

might be realised in the work of individual scholars. This in turn allows us to flesh out some possible contexts for the borrowings we examined in the [previous chapter](#).

3.1 A Scholar between Two Worlds: Berossus and the *Babyloniaca*

Sometime in the late fourth or early third century BC, a Babylonian named Berossus composed a work about Babylonian history and culture. Unsurprisingly, this work drew on Babylonian sources, and demonstrates knowledge of the traditional cuneiform scholarship associated with the temples. But the *Babyloniaca* (or less likely *Chaldaica*), is written in Greek and also reflects engagement with Greek intellectual traditions.¹ It is the only surviving work of its kind from Hellenistic Babylonia, making it a particularly valuable source for the study of cross-cultural contact between Babylonian and Greek intellectual culture.

Berossus' socio-cultural background would be clear from his name even if the Graeco-Roman sources told us nothing of his origins: Βηρωσ(σ)ός (L. *Berosus*) reflects an Akkadian theophoric beginning with the name of Bēl (Marduk), patron deity of Babylon and head of the Babylonian pantheon in the first millennium BC.² The very fact that Berossus has an Akkadian name places him among the Babylonian temple elite, whose onomastic usage remained conservative even though Akkadian had been supplanted by Aramaic as the spoken language of Babylonia. Since theophoric names in Mesopotamia tend to favour local deities, the

¹ *Babyloniaca* is generally thought more likely since this is the title used by Alexander Polyhistor, a key intermediary for later excerptors; the title of Polyhistor's own work was *Chaldaica*, which could have given rise to confusion (Schnabel 1923: 16; Kuhrt 1987: 33–5; De Breucker 2012b: 28). *Babyloniaca* is also, as De Breucker observes, the more historically correct title since the Chaldaeans were a particular group within Babylonia. Geller 2014a claims that Berossus wrote in Aramaic, but the argument is not convincing, equating the lack of surviving papyri from Babylonia with the absence of a Greek readership, assuming a translation programme at Alexandria for which there is no evidence (see [Chapter 4](#)) and offering problematic linguistic derivations.

² The ρ reflects the assimilation of l to following r in Late Babylonian Akkadian (Westenholz 2007: 285). On Berossus' name see further pages 117–19.

presence of Bēl supports the Greek testimonia that Berosus came from Babylon.³

There are several testimonia regarding Berosus' date, not all of which can be made to agree with one another. One which seems worth prioritising is the only chronological indicator attributed to Berosus himself:⁴

Βηρωσσός δὲ ἐν τῇ πρώτῃ τῶν Βαβυλωνιακῶν φησι γενέσθαι μὲν αὐτὸν κατὰ Ἀλέξανδρον τὸν Φιλίππου τῆν ἡλικίαν.

Berosus says in the first book of the *Babyloniaca* that he lived (or 'was born') in the generation (or 'lifetime' or 'youth') of Alexander son of Philip.

As there is some ambiguity over both γενέσθαι ('was born'/'lived') and ἡλικίαν ('youth/lifetime/generation'), this assigns Berosus' period of activity roughly to the late fourth and/or early third centuries.

As the only surviving example of a Babylonian scholar writing in Greek, Berosus has long been recognised as a key figure for the study of Greek-Babylonian cultural interaction.⁵ Unfortunately, the *Babyloniaca* did not fare well in the slow fires of ancient canon formation. It survives only as twenty-three fragments in later Greek and Latin authors, many or all of which may ultimately depend on an epitome of Berosus made by the Greek scholar Alexander Polyhistor in the first century BC.⁶ It is therefore difficult to gauge the original tone and range of the *Babyloniaca*, a difficulty which is exacerbated by the work's particular

³ *BNJ* 680, T2, T8d. The local onomastic patterns are clearly visible in Grainger's prosopography (Grainger 1997), and on a small scale in the scholarly colophons published by Hunger 1968: at Babylon Marduk- and Bēl names predominate (nos. 141–184); at Uruk Anu-names (nos. 87–118) and at Borsippa Nabû-names (nos. 124–140).

⁴ *BNJ* 680 F1b (1) (Syncellus); cf. T1 (Armenian Eusebius). On the conflicting evidence for Berosus' period of activity, see further pages 114–19.

⁵ Ruffing 2013 offers a survey of scholarship on Berosus from Richter's 1825 edition onwards. Gufler and Madreiter 2013 collect bibliography up to 2012, plus the contributions to Haubold *et al.* 2013. To this should be added Dillery 2015 with more recent bibliography.

⁶ For an overview of the various reconstructions of the transmission of Berosus' work see Ruffing 2013: 299–300. Debate centres on whether Polyhistor read Berosus directly or through an earlier work by Pseudo-Apollodoros; whether Polyhistor was an intermediary for all later excerptors or whether Juba, Abydenos, Posidonius and/or Josephus used Berosus directly; and how Eusebius and Syncellus accessed Berosus. The most in-depth treatments of the *Babyloniaca*'s textual history are Schnabel 1923: 33–171; De Breucker 2012b: 153–84, and (on Polyhistor in particular) De Breucker 2012a.

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transmission history. The textual witnesses who supply the longest and most numerous testimonia and fragments are three Jewish and Christian writers who used Berossus primarily for material relating to world chronology, the Flood and early Jewish history. The first is the Jewish historian Josephus (AD 37 – ca. 100), who cites Berossus in his *Jewish Antiquities* and *Against Apion*. The second is Eusebius (ca. AD 260–340), bishop of Caesarea and historian of early Christianity. He quotes Berossus, often via intermediaries, in two works: the *Praeparatio Evangelica*, a text of Christian apologetics, and the *Chronicon*, an account of the history of the world from Creation to his own time which survives partly in Armenian and Latin translations and excerpts from later Greek writers. Third is the Byzantine monk Syncellus (d. after AD 810), whose own world chronicle (*Ecloge Chronographias*) preserves extensive excerpts of Berossus, often within quotations from Eusebius' *Chronicon*.

These authors' focus on matters of Biblical relevance has no doubt skewed the transmitted text further, and indeed, the excerpts of Berossus in pagan authors reveal glimpses of very different material including astronomy, astrology and ethnography.⁷ Yet even the mutilated remains are sufficient to show that the *Babyloniaca* moves seamlessly between cultural and literary worlds, combining Babylonian and Greek concepts and content.

3.1.1 Babylonian Scholarship in the *Babyloniaca*

There can be no doubt about Berossus' knowledge of Babylonian scholarship, probably in Akkadian and Sumerian (although it is also possible that he accessed it in Aramaic material which has survived to us in cuneiform).⁸ Book 1 of the *Babyloniaca* affords several very clear examples of this. First, as has long been noted, the account of creation is dependent on the Akkadian creation epic

⁷ The distorting effect of the Christian and Jewish excerptors is well stressed by Kuhrt 1987: 35–6 and De Breucker 2011: 642. Madreiter 2013 offers a sobering assessment of Eusebius' engagement with the *Babyloniaca*, emphasising that he only had indirect access to the text and reshaped it to suit his purposes.

⁸ Beaulieu 2007: 123. For Berossus' relationship to cuneiform sources, see in general Schnabel 1923: 172–84; Komoróczy 1973; Burstein 1978; De Breucker 2003; De Breucker 2011: 643–7.

Enūma Eliš, which describes how Marduk (Bēl) defeats the primordial sea goddess Tiamat and her monsters, and subsequently creates the world.⁹ For example, Berossus' description of Bēl's creation of heaven and earth out of Tiamat's vanquished body parallels the account of the same events in *Enūma Eliš*:

When everything was arranged in this way, Belos rose up and split the woman in two. Of one half of her he made earth, of the other half sky; and he destroyed all creatures in her. – *BNJ* 680 F1b (7) (Syncellus)

Bēl trampled upon the frame of Tiamat,
With his merciless mace he crushed her skull.
He cut open the arteries of her blood.

He split her in two, like a fish for drying,
Half of her he set up and made as a cover, heaven.

– *Enūma Eliš* IV 129–31; 137–8 (trans. Foster 2005: 461–2)

Another group of primordial creatures from *Babyloniaca* 1 with a long history in Mesopotamia are the series of fish-men who emerged from the Red Sea during the reigns of early kings. The first and most important of these, Oannes, is said to have revealed to mankind the story of creation and taught them writing, laws, agriculture and 'everything connected with a civilised life' (πάντα τὰ πρὸς ἡμέρωσιν ἀνέκοντα βίου).¹⁰ These creatures represent the Babylonian *apkallū* or sages, seven hybrid beings with a combination of human and fish-like features who successively revealed knowledge of the arts of civilisation to humans, and who appear in various Mesopotamian literary works and incantations.¹¹ Oannes (Sumerian U'an, Akkadian Adapa) was the first and most significant *apkallu*; he also appears in the composition *Adapa and the South Wind*, in which he breaks the south wind's wing and travels to heaven, where he is tricked out of immortality.¹² The *apkallū* were still important figures in Babylonia in Berossus' time: images of them are popular on

⁹ E.g. Smith 1876: ch. 5; Lenormant 1880: 36–47; Schnabel 1923: 177–8; Heidl 1951: 77–81; Frahm 2010: 19–20; Haubold 2013b. Dalley 2013: 170–1 is particularly important in exploring variant versions of *Enūma Eliš* to which Berossus might have had access.

¹⁰ *BNJ* 680 F1b, 3a, 3b. ¹¹ De Breucker 2010 *ad* F1b with bibliography.

¹² The most recent edition of *Adapa and the South Wind* is Izre'el 2001; also translated in Dalley 2000. On Oannes/Uan/Adapa, see Streck 2003 with bibliography.

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Hellenistic cylinder seals, and U'an/Adapa is credited as the original builder of Uruk's Rēš temple in a cuneiform inscription from the late third century BC.¹³ Also from Hellenistic Uruk comes an Akkadian text which finds close and intriguing parallels with Berossus: the so-called List of Kings and Sages pairs selected rulers from the earliest kings down to the first millennium with a sage (for rulers before the Flood) or a human scholar (postdiluvian rulers), parallel to the associations between kings and sages in the *Babyloniaca*.¹⁴

Moving to early human history, despite the somewhat garbled form in which they have been transmitted it is clear that Berossus' lists of early kings derive from a Babylonian scholarly tradition represented by various Sumerian and Akkadian king lists.¹⁵ These compositions, many of which are not lists *strictu sensu* and sometimes include short narrative sections, give the names of each ruler and their number of regnal years; for the antediluvian kings this number is often fantastically high, as in Berossus. The *Babyloniaca* fragments conform particularly closely to some versions of the Sumerian King List (originally composed in the third millennium, but still copied in the Hellenistic period), and the Dynastic Chronicle, an Akkadian text derived from the King List.¹⁶ Yet Berossus also departs from this tradition in several respects, including his addition of Babylon instead of Eridu as a seat of antediluvian kingship, perhaps to boost his city's prestige by extending its history to the time before the Flood.¹⁷

¹³ Cylinder seals: Wallenfels 1993b. The inscription is that of Anu-uballit/Kephalon (edition: Falkenstein 1941: 6–7 with corrections in Van Dijk 1962: 47); cf. page 226.

¹⁴ The Uruk List of Sages was first published in Van Dijk 1962. On its relationship to Late Babylonian scholarship see Lenzi 2008a; on Berossus' relationship to the list see Dillery 2015: 66–80. The list dates from the early second century BC; it is therefore possible that it depends on or responds to Berossus' work, although more likely it represents a tradition that already existed in Berossus' time.

¹⁵ Schnabel 1923: 185–92; De Breucker 2012b: 71–8; Dillery 2015: 59–65.

¹⁶ Komořóczy 1973: 135–7; Finkel 1980: 70–2; De Breucker 2012b: 71–3; 86–91. The date of original composition of the Sumerian King List is debated; it certainly existed (in a rather different form) in the Ur III period (Steinkeller 2003) but a version may go back as far as the Sargonic period (Wilcke 2001, 108–15; Steinkeller 2003: 281–3; Glassner 2005: 95–6). The text was subject to ongoing redaction and the surviving copies exhibit considerable variation.

¹⁷ F3a and 3b (Babylon as seat of kingship before the Flood); F4a, 4b (Flood survivors 'return' to Babylon). On the relationship between Berossus and Mesopotamian lists of

When it comes to the rulers of the more recent past, the *Babyloniaca* again displays close parallels with cuneiform sources, particularly the Babylonian Chronicles, Akkadian texts which report royal deeds, military campaigns and other events affecting political, economic or religious life in Babylonia.¹⁸ Where the surviving *Babyloniaca* fragments and Chronicles deal with the same historical events, there are often similarities in both content and structure. For example, Berossus' narrative of Nebuchadnezzar II's early years (preserved in Josephus) corresponds exactly to a Neo-Babylonian Chronicle from Borsippa in the topics and their ordering: Nebuchadnezzar's departure from Babylonia to engage the Egyptian army in Syria, leaving his aged father Nabopolassar behind; Nebuchadnezzar's subsequent victory; Nabopolassar's death after reigning 21 years; Nebuchadnezzar's return to Babylon and accession.¹⁹ Berossus' account of the defeat and capture of the last Babylonian king Nabonidus by Cyrus corresponds closely to the description in another Neo-Babylonian Chronicle (*ABC* 7), while his statement that Cyrus pardoned Nabonidus and allowed him to live in Carmania parallels the Dynastic Prophecy, an Akkadian *ex eventu* text that 'predicts' the reigns of a series of first-millennium kings.²⁰

The similarities between Berossus and the Chronicles may also extend to style and phraseology. The notices about the deeds of Babylonia's rulers preserved in the Berossus fragments recall the Chronicles in their brevity and at times their terse style.²¹ As Bert

antediluvian kings see Glassner 2005: 57–8; De Breucker 2010 *ad* F3b. On the addition of Babylon, see also Komoróczy 1973: 136; Dillery 2015: 65.

¹⁸ See in general Drews 1975: 54; Burstein 1978: 23–8; Beaulieu 2007; Van der Spek 2008; Dillery 2013; Dillery 2015: 277–80. The Neo-Babylonian Chronicles are edited and translated in Grayson 1975a; Glassner 2005.

¹⁹ Joseph. *Ap.* 1, 135–7; *ABC* 5. Beaulieu 2007: 123–5; Van der Spek 2008: 291–2; De Breucker 2012b: 417–95, 550–6; Dillery 2013: 80–1; Dillery 2015: 278–80. For the place of origin of the Neo-Babylonian Chronicles as Borsippa rather than Babylon, see Waerzeggers 2012.

²⁰ Beaulieu 2007: 139–41; Van der Spek 2003: 319; Van der Spek 2008: 292–3.

²¹ See e.g. Schnabel 1923: 238–9; Van der Spek 2008: 290–5. However, Berossus' account also includes moments of drama and pathos that are a long way from the matter of fact tone of the Chronicles, such as the statement that the last Assyrian king Sarakos burnt himself in his palace (F7d; cf. Abydenus *BNJ* 685 F5; Haubold 2013c: 108–10) and the report that Nebuchadnezzar built the Hanging Gardens for his wife because she missed the mountainous scenery of her homeland (F8a; see further in this chapter).

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van der Spek has observed, the accounts of the Neo-Assyrian and Neo-Babylonian kings in the *Babyloniaca* even seem to echo the phrasing of the Chronicles. The repeated use of the Greek verb *paratattein* ('draw up forces') recalls the Chronicles' regular use of Akkadian *kašāru* ('draw up'), while the rare verb *apotympanizein* ('crucify on a plank') used by Berossus to describe the punishment of the evil king Labāši-Marduk (r. 556 BC) may refer to the Akkadian *simmiltu ša maš'alti* ('rack of interrogation'), mentioned in the Hellenistic Chronicles and Astronomical Diaries.²² Finally, when Berossus states that the kingship was preserved in Babylon for Nebuchadnezzar by the Chaldeans, the unusual Greek expression 'the kingship having been protected' (διατηρουμένην τὴν βασιλείαν) looks like a rendering of the Akkadian idiom *šarrūta našāru*, 'to protect kingship'.²³

The royal inscriptions of the Neo-Babylonian kings, or at least, those of Nebuchadnezzar, are another body of Akkadian material to which Berossus seems to have had access. As Paul-Alain Beaulieu and Bert van der Spek have shown, precise correspondences between Berossus' description of Nebuchadnezzar's building projects in Babylon and that king's Basalt Inscription make it almost inevitable that Berossus knew the content of this inscription or a later copy. The structure of Berossus' account mirrors that of the inscription, proceeding from Nebuchadnezzar's temple restorations and fortification works to the construction of his new palace in Babylon, including the detail that the palace was built in fifteen days, which appears only in this inscription and the *Babyloniaca*.²⁴ The mountain imagery used in Nebuchadnezzar's royal inscriptions to describe his palace may even underlie Berossus' description of the so-called Hanging Garden.²⁵ The Hanging Garden, however, is not attested in cuneiform and may be a Greek invention, at least in the form in which it is described. This brings us to Berossus' relationship with Greek intellectual culture.

²² Van der Spek 2008: 295. ²³ Van der Spek 2008: 302–13.

²⁴ Beaulieu 2007: 134; Van der Spek 2008: 296–300.

²⁵ Van der Spek 2008: 300; Rollinger 2013: 152–4.

3.1.2 *Berossus As Greek Philosopher and Historian?*

The most visible engagement is polemical; some of what Berossus says seems designed to ‘correct’ Greek traditions about Babylonia. In one case at least this was explicit: according to Josephus, Berossus ‘censures Greek historians’ who wrongly believed that the Assyrian queen Semiramis founded Babylon and was responsible for its marvellous buildings, which Berossus attributes instead to Nebuchadnezzar.²⁶ Robert Rollinger has suggested that Berossus also used Babylon’s monuments to respond to other Greek narratives about the city.²⁷ For example, the description of Nebuchadnezzar’s fortifications in *Babyloniaca* 3 implicitly refutes Herodotus’ claim that Cyrus captured the city by diverting the Euphrates: Berossus states that the king surrounded the inner and outer city with three walls each ‘so that it would no longer be possible for besiegers to turn back the river and use it against the city’ (πρὸς τὸ μηκέτι δύνασθαι τοὺς πολιορκοῦντας τὸν ποταμὸν ἀναστρέφοντας ἐπὶ τὴν πόλιν κατασκευάζειν). If Berossus’ account of the Hanging Garden – in the *Babyloniaca* built by Nebuchadnezzar for his homesick Median wife who longs for her native mountains – is also engaging with Greek traditions, it offers both a correction and a creative response. Berossus may have picked up a Greek story which attributed the Garden to an Assyrian or Persian king, restored it to its original context (if there was a historical garden it was likely attached to the palace) and adapted it to further his own image of Nebuchadnezzar as a remarkable builder king and the rightful successor to the Assyrian empire.²⁸ Elements of Berossus’ Babylonian geography may also have a didactic function: we will return to this in [Chapter 6](#).²⁹

²⁶ *BNJ* 680 F8a (142); see Van der Spek 2008: 290 and Haubold 2013c: 107–8 for the suggestion that Berossus’ polemical stance in itself represents engagement with Greek historiographical models (criticising one’s predecessors).

²⁷ Rollinger 2013.

²⁸ *BNJ* 680 F8a; Burstein 1978: 27 n.106 (although Burstein suggests the story originated as a popular tradition in Babylonia, as does De Breucker 2010 *ad loc.*, who does not detect Greek influence here); Van der Spek 2008: 302–13; Haubold 2013c: 112–15; Rollinger 2013: 147–55. On Berossus and the Hanging Garden, see also Beaulieu 2007: 133–8; Dillery 2015: 288–90 with bibliography.

²⁹ For further possible ‘corrective’ engagement see e.g. Burstein 1978: 24 n.80 (Sennacherib and Tarsus); Dillery 2015: 154 (Sardanapalus/Sennacherib), 237

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Yet Berossus' engagement with Greek thought runs much deeper than polemic. Although the *Babyloniaca* owes much to Babylonian scholarship, this material is augmented and at times recast in ways which correspond to Greek concepts and conventions. One indication of Berossus' familiarity with Greek literature and desire to engage his Greek readers on their own terms is the inclusion of elements characteristic of Greek rather than cuneiform scholarship. A commonly cited example is the autobiographical statement from *Babyloniaca* 1 in which Berossus states that he lived at the time of Alexander, where he also claims to have used written sources which had been kept carefully in Babylon for hundreds of thousands of years.³⁰ This kind of first-person intervention is alien to cuneiform scholarship, where authors left little to no personal imprint on their works and most compositions were anonymous, but typical of Greek historians who regularly stated their credentials, sources and methodology towards the beginning of their work. At a larger scale, the section on Babylonia's geography, flora and fauna reads like Greek ethnography, a genre not represented in Sumero-Akkadian scholarship but precisely the type of information a Greek reader would expect to find in a work about a foreign land and its people.³¹

Elsewhere, it is the way in which material derived from Babylonian literary traditions is framed or (re)shaped that suggests familiarity and conscious engagement with Greek scholarship. For instance, as Amélie Kuhrt, Geert De Breucker and Johannes Haubold observe, Berossus seems to have given his creation account a Greek philosophical cast.³² Although the beings generated in the primeval water correspond to Tiamat's monsters in *Enūma Eliš*, in the *Babyloniaca* they are imagined in ways which more closely resemble beings from Greek mythology and philosophy. Whereas the eleven monsters of Tiamat's brood feature

(Eudemos' version of *Enūma Eliš*), 269–70 (correcting Herodotus), 291–3 (Semiramis falsely said to be founder of Babylon).

³⁰ *BNJ* 68o F1a, F1b.

³¹ Descriptions of peoples and places appear in literary texts and the accounts of campaigns and conquests in the Neo-Assyrian kings' royal inscriptions, but there was no dedicated genre of ethnographic writing. On the differing geographical traditions in Mesopotamia and the Greek world, see [Chapter 6](#).

³² Kuhrt 1987: 47; Haubold 2013b; Haubold 2013d: 148–53.

vipers, dragons, hounds, and scorpion-men, Berossus describes animals with two faces, hippocentaurs and satyr-like beings which recall the hybrid primordial beings envisaged by Empedocles or other composite creatures from Greek mythology.³³ Moreover, the primordial beings of the *Babyloniaca* are not created like Tiamat's monsters but arise spontaneously from the water, a recasting of the myth in terms of physical processes which aligns it with Greek philosophical theories about spontaneous generation in the creation of animals.³⁴

Haubold also detects Stoic overtones in Berossus' account of the creation of humans (F1a–b). There are difficulties with the transmitted text here, as both Eusebius and Syncellus present two incompatible versions of human creation, but Haubold suggests that these represent a garbled rendering of a two-stage account which originally described first the creation of animals alone, and then that of humans.³⁵ Instead of mankind being created from the slaughter of a lesser god as in Mesopotamian literary texts, Berossus seems to have said that the supreme god, Bēl, used his own blood to create humans, which explains why they have rational thought (*nous*) and a share in divine wisdom (*phronesis*).³⁶ Whether Berossus took this version of events from a lost Mesopotamian literary tradition or crafted it himself, Haubold argues that it is included in the *Babyloniaca* to resonate with Greeks familiar with Stoic thought about *nous* and the rationality of humans compared with animals.³⁷

Similar recasting is detectable in the accounts of first-millennium kings in *Babyloniaca* Book 3. Here Berossus engages not just with earlier Greek literature and philosophy but also with the Greek political discourse of his time. Several scholars have suggested that apparent inaccuracies in Berossus' treatment of the Neo-Assyrian and Neo-Babylonian rulers (compared with the cuneiform sources) in fact represent deliberate reshaping, aimed at drawing connections between Babylonians and Greeks. It is

³³ Haubold 2013b: 37–40. De Breucker (*ad BNJ* 680 F1b) suggests that 'hippocentaurs' may be a later Greek interpretation of something Berossus said, but even without this Berossus' account is much closer to Empedocles than *Enūma Eliš*.

³⁴ Haubold 2013b: 39. ³⁵ Haubold 2013b: 40–1.

³⁶ *BNJ* 680 F1b (7); Haubold 2013b: 40–2. ³⁷ Haubold 2013b: 40–2.

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possible that what appears to be a conflation of Sennacherib's Cilician campaign and Sargon II's battle against Greeks is in fact intentional, designed to set up the Greeks as enemies of the Assyrians (thus aligning them with the Babylonians) and depict the Greek invasion of Cilicia as a historical model for Alexander's attack on the Persian empire.³⁸ Meanwhile, Kuhrt, Dillery and Haubold have all drawn attention to anachronisms in Berossus' account of Nebuchadnezzar's campaign in Syria which assimilate the Neo-Babylonian king and the geopolitical framework of the sixth century BC to the Macedonian rulers and political geography of Berossus' own time. References to Coele Syria, satraps and *philoï* give the episode a Greek, Hellenistic and indeed specifically Seleucid inflection.³⁹ As Dillery notes, whether this is deliberate recasting or simply a result of Berossus' way of viewing the world, it attests to his awareness of Greek conceptual frameworks.⁴⁰

3.1.3 *The Limits of 'Engagement'*

While it is clear that Berossus in some sense engages with both Greek and Babylonian sources and ideas, what precisely that 'engagement' entailed is open to debate.⁴¹ One challenge is deciding whether a resonance with a given source or tradition does in fact indicate a relationship of direct dependence or influence, since many of the surviving *Babyloniaca* fragments are very short and have undergone several stages of excerpting. Frequently there is insufficient material to test a parallel over a sustained stretch of text, and what survives in any given case may represent a much compressed or altered version of the original.

This difficulty is particularly acute with phraseology and narrative texture. For instance, much has sometimes been made of the comment at the end of Oannes' creation account that 'he says that this was an allegorical account of nature' (ἀλληγορικῶς δέ φησι

³⁸ Haubold 2013c: 111; Lanfranchi 2013: 65–9.

³⁹ Kuhrt 1987: 56; Dillery 2013: 81–3; Haubold 2013d: 161–2; Dillery 2015: 280–5; Haubold 2016: 93–7. On the 'Seleucid' geography here, see further pages 267–71.

⁴⁰ Dillery 2013: 84; Dillery 2015: 283.

⁴¹ Cf. Haubold 2013a: 7: 'One of the most fruitful challenges in reading the *Babyloniaca* is precisely to explore the space that opens up between two extremes: slavish faithfulness to Mesopotamian tradition and servile assimilation to the dominant Greek culture.'

τοῦτο πεφυσιολογήσθαι).⁴² If the ‘he’ here is Berossus, this is potentially evidence of his knowledge of Greek hermeneutics; allegorical readings were not characteristic of Mesopotamian scholarship, but are associated with Greek philosophy, and in particular with the Stoics. This insertion could, therefore, be an attempt by Berossus to recast the bizarre and gruesome Babylonian creation story in terms more familiar to a Greek audience.⁴³ Unfortunately, it is equally possible that the phrase is an explanatory comment from a later excerptor – perhaps Polyhistor, whose account Syncellus is quoting here – and represents *interpretatio Graeca* by the Greeks themselves.⁴⁴ The apparent parallels in style and narrative structure between the *Babyloniaca* fragments and the Akkadian king lists and Chronicles should also be treated with caution. While it is possible that the laconic notices which survive do reflect Berossus’ original text, cases where epitomised ancient texts can be compared with the originals show how brutally the epitomisation process could alter the narrative texture.⁴⁵

In other cases, the parallels are so general that it is hard to argue conclusively for a shared source. One example is Berossus’ account of Sennacherib overthrowing the Babylonian king Bēl-ibni which, as Robert Drews observed, recalls the report of the same episode in a Chronicle from the Neo-Babylonian period.⁴⁶

Sennacherib marched down to the country of Akkad and carried away the booty in Akkad. They brought Bēl-ibni and his nobles in fetters to Assyria. Three years Bēl-ibni was king in Babylon. Sennacherib placed his son Aššur-nādin-šumi upon the throne in Babylon. (*ABC* 1 = *CM* 17, ii.26–31, trans. after Drews)

In the third year of this person’s (i.e. Bēl-ibni’s) reign, Sennacherib, king of Assyria, collected an army against the Babylonians, confronted them and was

⁴² *BNJ* 680 F1b (7).

⁴³ Thus Schnabel 1923: 178; Heidl 1951: 79–80. Dillery raises the valid objection that the fish-man who relates the narrative might be expected to be equally offensive to Greek rationalising tastes, and suggests instead that characterising the account as allegorical was part of Berossus’ attempt to historicise it (Dillery 2015: 234–5).

⁴⁴ The passage is doubted by De Breucker (2010 *ad loc.*) on the grounds that the meaning ‘allegorical’ for *allegorikos* and derivatives postdates Berossus. Haubold 2013b: 37 and Dillery 2015: 229–33 argue that even if this phrase itself is later, it reflects Berossus’ approach to the material, e.g. in translating Tiamat into *thalassa*.

⁴⁵ Brunt 1980. ⁴⁶ Drews 1975: 54.

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victorious; and taking him prisoner along with his friends, he had them led into the land of Assyria. He ruled over the Babylonians and placed as king over them his son, Asordanios. (*FGrHist/BNJ* 680 F7.29, trans. Drews)

These accounts are similar insofar as they present the same essential information in the same order, but how significant is this similarity? Both are bald statements of a sequence of events and the fact that they agree on the events and the sequence does not necessarily mean that one derives from the other. Both may simply be expressing historical knowledge that any Babylonian living in the later first millennium BC would possess. Another example is the report in the *Babyloniaca* that Nabonidus built walls in Babylon; although the same statement appears in the Dynastic Prophecy, this is too banal a similarity to necessitate a shared source tradition, and as the ‘wall of Nabonidus’ was still standing in Berossus’ time there is no need for him to have taken this information from a written source at all.⁴⁷

Comparable issues arise regarding parallels between the *Babyloniaca* and Greek historiography. While Berossus’ comments on Semiramis and probably also the Hanging Garden seem to be responding to Greek ideas about Babylon, Christopher Tuplin concludes that there is little in the surviving fragments to indicate a substantive connection with any particular work(s) of Greek historiography.⁴⁸ Autobiographical statements or the presentation of narratives that diverge from those of existing Greek historical writers may look characteristic of Greek historiography to a Classicist, but they are not so specifically Hellenic that they *require* Berossus to be following a Greek model; indeed, there is no conclusive evidence that Berossus read any Greek historian.⁴⁹ As Tuplin puts it: ‘it is at least tricky to tell apart the inheritor of Greek *historiē* from the Babylonian who wants to get things (as he sees them) right’.⁵⁰ Importantly, Tuplin also draws attention to the fallacy of assuming that divergences from the extant cuneiform sources must reflect Greek influence.⁵¹

⁴⁷ *BNJ* 680 9a (149); *BM* 40623 ii 15’; the parallel is noted by Van der Spek 2008: 293. The Wall of Nabonidus is mentioned as the location of lightning strikes in third-century Astronomical Diaries: *AD* –293 rev. 14’; *AD* –284 obv. 4’.

⁴⁸ Tuplin 2013. ⁴⁹ Tuplin 2013: 186–8, 194. ⁵⁰ Tuplin 2013: 188.

⁵¹ Tuplin 2013: 193 n.72.

Perhaps the greatest uncertainties of all concern the overall tone, cultural affiliations and ideological import of the *Babyloniaca*. Given the small and skewed set of fragments that remain and the absence of programmatic statements of intent in what survives, it is difficult to extrapolate the thrust or aims of the surviving sections, let alone the work as a whole. Is Berosus to be seen as a Seleucid apologist who linked Greek and Babylonian history to provide ideological support for the Seleucid regime?⁵² Does his alignment of Neo-Babylonian and Seleucid rulers imply that Babylonia's latest conquerors represented a return to the golden age of Babylonian imperialism represented by Nebuchadnezzar? Or does the alignment have a more didactic function: to offer the foreign rulers models of how to be good Babylonian kings and express hope that they would act as new Nebuchadnezzars?⁵³ Alternatively, is the intended message darker? Do the narratives of bad kings like Labāši-Marduk, tortured and killed by his own people, also represent a warning to the Seleucids of the consequences of mistreating the city and people beloved of Bēl?⁵⁴ Or, finally, was Berosus' work an apolitical celebration of Babylonia's history and culture, stimulated by interest in the non-Greek world characteristic of the age of the diadochi?⁵⁵ All these readings have been proposed with cogent arguments to support them, but it is very hard to choose one over the others.

3.1.4 *In Search of Berosus*

Despite ongoing debate over the details of Berosus' engagement with specific Greek and cuneiform material, it is undeniable that he was well versed in both Greek and Babylonian intellectual traditions and deliberately sought to combine them. This, as Wilfred Lambert observed, makes the *Babyloniaca* of great importance for the history of ideas.⁵⁶ But if we wish to use the fragments and testimonia to construct a more socially

⁵² Kuhrt 1987: 56; Dillery 2013: 90; Lanfranchi 2013.

⁵³ Burstein 1978; Kosmin 2013b. ⁵⁴ Dillery 2015: 217–19, 296–300.

⁵⁵ Gruen 2017: 305–7 (with some acute criticisms of alternative interpretations).

⁵⁶ Lambert 1976: 171 (focusing on Babylonian ideas).

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contextualised intellectual history, we run into difficulties. Berossus' work offers a crucial demonstration of the kind of cross-cultural engagement possible in early Hellenistic Babylonia. But how representative is it? Is Berossus a rare case which illustrates the limits of the possible, or was his cultural and intellectual bilingualism typical among the Babylonian elite of his time? How did he gain access to Babylonian records, and acquire his knowledge of Greek? Did he himself read Herodotus or Ctesias, or pick up the basic gist of their work from conversations with people who had? What were his aims and audience for the *Babyloniaca*? In order to use Berossus as the starting point for the kind of cross-cultural intellectual history envisaged in this book, we would need firm answers to at least some of these questions. But the more closely one looks at the evidence, the less certain a figure Berossus becomes.

3.1.4.1 A Chaldaean without the 'Chaldaean art'? Berossus and Astral Science

The uncertainties begin with the scope of the *Babyloniaca* and Berossus' intellectual profile. Given Babylonian expertise in astronomy and astrology, and the pre-existing Greek admiration and appetite for these, one might expect Berossus to have inducted his Greek audience further into the mysteries of this 'Chaldaean' art. Indeed, later Greek and Latin authors state emphatically that he did so: Josephus writes that Berossus 'published for the Greeks writings about *astronomia* and the philosophical speculations of the Chaldaeans';⁵⁷ Vitruvius states that he was the first of the Chaldaeans to hand down knowledge of *astronomia* and settled on the Greek island of Cos to teach it.⁵⁸ Pliny even claims that the Athenians dedicated a statue of Berossus with a gilded tongue because of his 'divine' astrological predictions.⁵⁹ Yet both the testimonia and fragments which deal with celestial matters have

⁵⁷ περί τε ἀστρονομίας καὶ περί τῶν παρὰ Χαλδαίοις φιλοσοφουμένων αὐτὸς εἰς τοὺς "Ἑλληνας ἐξήνεγκε τὰς συγγραφάς (*BNJ* 680 T3 = *Jos. Ap.* 1.129).

⁵⁸ *primusque Berossus in insula et civitate Coe consedit ibique aperuit disciplinam*: Vitruv. *De arch.* 9.6.2 (=T5a; cf also T5b).

⁵⁹ Plin. *HN* 7.123 (= *BNJ* 680 T6). Berossus' predictive abilities also underlie the tradition that he was the father of the Sibyl (*BNJ* 680 T7a–c).

long been viewed with suspicion by modern scholars, and debate over their authenticity is ongoing.⁶⁰ This issue is important because of the resulting implications for how we reconstruct Berosus' affiliation to Babylonian and Greek scholarship, and potentially also the broader relationship between the two intellectual cultures in his time.

Doubts about Berosus' astronomical expertise were circulating at least by the eighteenth century, long before the publication of any cuneiform astronomical texts. Convinced that the 'opinions absurdes' reflected in the astronomical doctrines attributed to Berosus would have been impossible in Hellenistic Babylonia given the long history of astronomical observation in the region,⁶¹ Jean Sylvain Bailly in his 1775 *Histoire de l'astronomie ancienne* concluded that there must have been two men named Berosus: the historian of Alexander's time, who wrote a historical and ethnographic work and knew nothing of proper astronomy, and a much earlier homonym who introduced rudimentary Babylonian astronomy to the Greeks.⁶² Nineteenth-century scholars were more sympathetic to Berosus' astronomical expertise but questioned his Mediterranean career: Johann Richter, François Lenormant, Ernst Maass and Eduard Schwartz accepted the astronomical material as genuine Berosus but were all sceptical about the school on Cos and statue in Athens.⁶³ Richter and Müller divided the fragments dealing with astronomy or astrology from the rest and suggested that they came from a separate Berossan work, finding no place for them in their reconstructed *Babyloniaca* which they viewed as primarily historical.⁶⁴ None of these scholars, however, doubted the authorship of these fragments or the idea that Berosus was an

⁶⁰ Spurious: Jacoby, *FGrHist* 680; Kuhrt 1987; Pongratz-Leisten 2006; De Breucker 2010; De Breucker 2012b: 579–609. Partly or fully authentic: Schnabel 1923; Drews 1975; Lambert 1976; Burstein 1978: 31–2; Verbrughe and Wickersham 1996: 15; Van der Spek 2008: 288–9; Steele 2013b; Dillery 2015: 240–53.

⁶¹ Bailly 1775: 386.

⁶² Bailly 1775: 385–8. Bailly thought that this Berosus introduced the sundial; based on this and the fact that he apparently did not know why eclipses occur, Bailly reasoned that he must have predated Herodotus (who mentions the sundial) and Plato and Aristotle (who understood eclipses).

⁶³ Richter 1825: 17, 38–41; Lenormant 1871: 410; Maass 1892: 226–7; Schwartz 1897.

⁶⁴ Richter 1825: 39; *FHG* 2 495–510.

authority on Babylonian astronomy. That changed in 1958, when in a turn back towards Bailly's position, Felix Jacoby detached the fragments and testimonia dealing with astronomical and astrological material not only from the *Babyloniaca*, but from Berossus himself, creating a Pseudo-Berossus to whom to attribute them.⁶⁵

Since Jacoby died before completing his commentary on the Berossus fragments, his full reasons for rejecting the astronomical/astrological material are unknown. Those who have followed his position have focused on the fact that what the surviving fragments say about this quintessentially 'Chaldaean' area of expertise does not look very Chaldaean, based on what we know of Babylonian celestial scholarship in the later first millennium. Amélie Kuhrt, who has made the fullest case to date against their authenticity, stressed the fact (observed by Neugebauer) that they contain no trace of the mathematical astronomy that existed in Berossus' Babylon.⁶⁶ Kuhrt also emphasised the lack of correspondence between the astronomical or astrological doctrines in these fragments and those attested in the cuneiform sources. In particular, there is no evidence in the cuneiform material for Berossus' theory that the Moon is a half-fiery sphere, or the concept of a 'Great Year' of tens of thousands of years at the end of which the cosmos will be destroyed by fire and flood.⁶⁷ In fact, as Kuhrt observed, both the Great Year and the half-fiery Moon seem rather to reflect Greek philosophical and astronomical concepts: the Stoic doctrine of *ekpurosis* (which posited a periodic conflagration of the cosmos) and the idea of the planetary spheres.⁶⁸ Like Jacoby, Kuhrt also rejected the testimonia about Berossus' celestial expertise, concluding that Berossus the astrologer was a Greek creation of the late Hellenistic period, designed to lend authenticity via his Chaldaean credentials to the

⁶⁵ *FGrH* 680 Fragments 15–22.

⁶⁶ Kuhrt 1987: 36–44 (with Neugebauer 1963: 529). Kuhrt, followed by De Breucker (2010, 2012b: 579–609), rejects all of Fragments 15–22 except 16a which, as both note, is primarily historical rather than astronomical.

⁶⁷ Kuhrt 1987: 39–43. Lambert also rejected Seneca's claim about the 'Great Year' for the same reasons, although he saw it as a misinterpretation of Berossus, who, he thought, did write on astronomical and astrological matters (Lambert 1976: 172–3).

⁶⁸ Kuhrt 1987: 39–43.

predictions of Greek and Roman writers.⁶⁹ The most recent editor of the fragments, Geert De Breucker, reached similar conclusions, although he leaves open the possibility that Berosus did write on astronomy and astrology but that this material has not survived.⁷⁰

The possibility of lost material is also emphasised by those who defend the idea that a single Berosus wrote about both historical and astronomical matters. Given the fragmentary state of Berosus' work, it is impossible to exclude the possibility that other material on astronomy and astrology has simply not survived the transmission process.⁷¹ The authors largely responsible for our version of the *Babyloniaca* were mining it for material relevant to the Bible and early Jewish and Christian history; they had little need to calculate planetary motion or interpret lunar eclipses. The testimonia about Berosus' celestial expertise all come from pagan authors, from whom there are otherwise very few surviving fragments of the text; these hints may therefore reflect a larger quantity of material that has not been preserved.

More importantly, however, neither the absence of technical Babylonian astronomy nor the presence of material which is not recognisably Babylonian constitutes a decisive argument against the authenticity of the surviving fragments or Berosus' celestial credentials. John Steele has argued persuasively that the modern classification of these fragments as 'astronomical' has skewed discussion of their authenticity, leading scholars (wrongly) to judge them against Late Babylonian mathematical astronomy and find them wanting.⁷² In fact they are not strictly 'astronomical' at all, but contain cosmological or historical statements for which parallels can easily be found in other genres of cuneiform scholarship, including more traditional astronomical and astrological material.⁷³ For instance, as Paul Schnabel and Samuel Burstein both observed, Berosus' model for the appearance of

⁶⁹ Kuhrt 1987: 39–44. As Kuhrt observes in response to Drews' objection that there would have been no reason to invent a Pseudo-Berosus if the original did not have astrological expertise, Berosus' status as a Chaldaean priest would provide authentication (Kuhrt 1987: 44 n.32; cf. Drews 1975: 52).

⁷⁰ De Breucker 2010 *ad loc.*; De Breucker 2012b: 609.

⁷¹ E.g. Lambert 1976: 171; Burstein 1978: 31–2; Drews 1975: 53. ⁷² Steele 2013b.

⁷³ Steele 2013b: 103. The possibility that the astronomy/astrology Berosus transmitted was the traditional type was already raised by Lambert 1976: 171.

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the Moon recalls the explanation for the Moon's phases given in *Enūma Eliš*; further parallels can be found in MUL.APIN, as demonstrated by Steele.⁷⁴ There is thus no need to posit Greek influence or doubt the Babylonian origin of this material. The absence of technical astronomy from the *Babyloniaca* need only mean that Berossus himself did not have expertise in this field: not every Babylonian scholar was a specialist in mathematical astronomy, and, as Steele has demonstrated elsewhere, Late Babylonian astronomical texts would probably have been incomprehensible to scribes without specific training.⁷⁵

Even if he *was* familiar with mathematical astronomy, Berossus might have seen no reason to use it. Based on what survives of the work, it is hard to see where technical astronomy would have fitted in the *Babyloniaca*. In addition, as Steele points out, Greek readers at the beginning of the third century BC would have been unlikely to understand or appreciate such material. Late Babylonian mathematical astronomy was very different from the theoretical and philosophical focus of the Greek astronomy in the early Hellenistic period; the quantitative developments that facilitated Greek engagement with this aspect of Babylonian astronomy came later, in the second century BC.⁷⁶ The absence of this type of material from the *Babyloniaca* may equally reflect Berossus' knowledge of the interests and limitations of his Greek audience.

Berossus' Greek audience may also explain the presence of recognisably Greek concepts. It is symptomatic of the singular interpretative history of the astronomical fragments that Greek elements have here been taken as a sign of inauthenticity, whereas in other contexts they are read as evidence for Berossus' sophisticated engagement with Greek intellectual culture. Why should this not be the same with material relating to the cosmos? Steele's suggestion that the apparent mix of Greek and Babylonian ideas in Berossus' lunar model was designed to make it more palatable to a Greek audience seems eminently plausible, and indeed precisely in line with what Berossus does elsewhere.⁷⁷ Another, rarely stated possibility is that Berossus himself found the Greek models

⁷⁴ Schnabel 1923: 178–9; Burstein 1978: 31; Steele 2013b: 104–9.

⁷⁵ Schnabel 1923: 238–9; Steele 2004: 341–2. ⁷⁶ Steele 2013b: 109.

⁷⁷ Steele 2013b: 109.

persuasive. If we regard him as a scholar who moved between cultural and intellectual traditions, we should not assume that his intellectual affiliations were always with one rather than the other.

On balance, a position along the lines taken by Steele seems the most satisfactory solution to the problem of the ‘astronomical’ fragments and testimonia. There are insufficient grounds for rejecting them wholesale: although it is likely that some spurious material accreted around the name of Berosus the Chaldaean, the fragments show enough affinities with cuneiform scholarship to invalidate claims that there is nothing genuinely Babylonian about them, while the Hellenic features can be explained as deliberate accommodation or Greek influence. But it is the residual uncertainty that is the point here. Depending on the position we take towards the astronomical fragments, we end up with very different reconstructions of Berosus and the intellectual milieu in which he operated. Is he a key connecting link in the westwards transmission of Babylonian astronomy who moved to the Greek world to pass on Chaldaean learning? An author so conscious of his Greek audience that he utilised the conceptual models they would understand rather than the technical astronomy written by his contemporaries? A historian who knew little and wrote less about astronomical matters? Once again it is difficult to decide.

3.1.4.2 *The Seleucid Connection*

Unfortunately, the problems do not cease if we reject Berosus’ foreign career, strip him of his astronomical expertise and restore him to Babylon as a typical priest-scholar with some additional knowledge of Greek literature and philosophy. Although many modern scholars have doubted the sojourn on Cos, most works which mention Berosus will state without qualms that he had contact with the Seleucid court and wrote his *Babyloniaca* for Antiochus I, at the king’s request.⁷⁸ Further support for this narrative has been derived from an attractive onomastic match in the

⁷⁸ E.g. Tarn 1966: 41; Murray 1972: 208; Drews 1975: 50; Burstein 1978: 5; Strootman 2007: 214; De Breucker 2011: 637; Haubold 2013d: 143; Gruen 2017: 304–7 (who also seems to accept the Cos episode as genuine). Tarn, Murray, Strootman and Gruen claim with varying degrees of certainty that the *Babyloniaca* was written at Antiochus’ request.

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cuneiform material from Babylon, proposed by Bert van der Spek. A man named Bēl-rē'ûšunu, for which Berossus is a plausible Greek reflex, appears in administrative texts from the mid-third century BC as *šatammu* (head administrator) of the Esagila temple – a position involving precisely the sort of access to both the Seleucid royal house and cuneiform scholarship that could facilitate the composition of an account of ‘things Babylonian’ for a Seleucid royal patron.⁷⁹ Yet Berossus’ link with the Seleucid court is much less secure than typically acknowledged.

The direct evidence for a royal connection depends solely on the claim that the *Babyloniaca* was written for a ‘king Antiochus’, which appears first in Tatian, a Christian apologist writing in the second century AD, and again in Eusebius’ *Praeparatio Evangelica*, where the wording suggests a different king is meant. Tatian states that Berossus ‘composed a history of the Chaldaeans in three books for the third Antiochus after him’ (Ἀντιόχῳ τῷ μετ’ αὐτὸν τρίτῳ τὴν Χαλδαίων ἱστορίαν ἐν τρισὶ βιβλίοις κατατάξας) where ‘him’ refers to Alexander the Great; in Eusebius’ version the relevant Antiochus is ‘the third after Seleucus’ (τῷ μετὰ Σέλευκον τρίτῳ).⁸⁰ All conclusions about Berossus’ relationship with the Seleucid dynasty therefore rest on two short phrases in sources written 400–600 years after his death, which make conflicting claims and neither of which is stated to be a quotation of Berossus himself. It is also unclear whether Eusebius here preserves an independent tradition or has simply decided to disambiguate the αὐτόν of his source.

Unfortunately, neither of these reports can be comfortably reconciled with the sequence of rulers in early Hellenistic Babylonia. If we take the phrase to mean ‘the third ruler after him’, Tatian’s version must refer to Antiochus I, but is difficult since he was not the third ruler of Babylonia after Alexander the Great.⁸¹ Even leaving out Antigonus’ period of control, the third

⁷⁹ Van der Spek 2000: 439. The *šatammu* of Esagila was the administrative and political representative of the temple and civic community. He had cultic duties, but is attested mainly in legal and administrative contexts (Boiy 2004: 265). Bēl-rē'ûšunu, *šatammu* of Esagila is attested in documents from 258 to 252 BC (Boiy 2004: 199).

⁸⁰ Tatianus, *Ad Gr.* 36.2; Euseb. *Praep. evang.* 10.11.8.

⁸¹ The alternative translation, ‘the third Antiochus after him’, is unlikely on chronological grounds: this would take us to Antiochus III, contradicting both Syncellus’ statement

king after Alexander was Seleucus I, after Philip Arrhidaeus and Alexander IV.⁸² Eusebius' 'the third after Seleucus' presumably indicates Antiochus II, but the third ruler after Seleucus I was Seleucus II. Syncellus' statement that Berossus predated Manetho, who wrote under Ptolemy II, does not help us to choose between these possibilities; the regnal periods of both Antiochus I (281–261) and II (261–246) fall within Philadelphus' long reign (283–246).⁸³

These problems are not such as to invite total distrust in the surviving testimonia. Given the complexities of the political situation between Alexander's death and Seleucus' consolidation of power, divergent traditions about the succession of rulers in Babylonia are unsurprising; indeed, the two surviving Babylonian king lists from the Hellenistic period count the rulers of the region between Alexander the Great and Seleucus differently. The wording of Tatian and Eusebius can also be salvaged in various ways. Eusebius' 'third after Seleucus' could refer to Antiochus II by inclusive counting (Seleucus I, Antiochus I, Antiochus II), as occurs in Philo, where Ptolemy II is referred to as 'the third after Alexander who took control of Egypt'.⁸⁴ Tatian's 'third after Alexander' might be a similar case (Alexander IV, Seleucus I, Antiochus I).⁸⁵ At the same time, the difficulties with the transmitted text preclude a definite identification with a particular Seleucid king, inviting a certain amount of doubt over the broader historical claims made. Moreover, even if Tatian and Eusebius are right that Berossus did dedicate the *Babyloniaca* to a king Antiochus, this does not constitute evidence that it was written at the ruler's behest, or that he ever read the text; after all, not all royal dedications derive from or result in

that Berossus wrote before Manetho and Berossus' own claim that he wrote during the time of Alexander (even with the extended meaning of ἡλικία).

⁸² Cuneiform documents were dated by years of Antigonus, but he is given the title *rab uqi* (= στρατηγός) rather than *šarru*, 'king' – cf. Boiy 2004: 123–5.

⁸³ *BNJ* 680, T10a.

⁸⁴ Philo *De Vita Mosi* 2.29 (τρίτος μὲν ἦν ἂπ' Ἀλεξάνδρου τοῦ τὴν Αἴγυπτον παραλαβόντος).

⁸⁵ The Uruk King List omits Alexander IV and treats Antigonus as a king (IM 65066 rev. 3–5; edition: Grayson 1980), while the Babylonian King List describes Antigonus as 'general' and gives Alexander IV a reign of 6 years (BM 35603 obv. 3–5; edition: *CM* 4).

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patronage. Such is the fragile foundation on which many a historical reconstruction has been built.

3.1.4.3 *Bēl-rē'ûšunu, šatammu of Esagila?*

Even if Berossus' royal connections are in doubt, we can still fall back on his priestly credentials and connection with Esagila – or can we? If Berossus is indeed to be equated with Bēl-rē'ûšunu the *šatammu* this would create an iron-clad link to Esagila to bolster Tatian's assertion that he was a priest of Bēl, but here further problems arise.⁸⁶ The first is chronological. Even the latest possible interpretation of Berossus' statement about his relationship to Alexander's lifetime would place him in his late sixties or seventies in the 250s BC when the attested Bēl-rē'ûšunu was *šatammu* – not impossible chronologically, but certainly unlikely. This does not necessarily mean that we need to abandon the Esagila or Bēl-rē'ûšunu connection altogether; De Breucker has suggested cautiously that one might reconstruct an earlier Bēl-rē'ûšunu, the grandfather of the one attested in the surviving documents.⁸⁷ In Babylonia, papponymy was typical and priest-hoods were hereditary; it is therefore quite plausible that Bēl-rē'ûšunu the *šatammu* had a homonymous grandfather who was part of the temple hierarchy of Esagila around 300 BC. Provided the Berossus = Bēl-rē'ûšunu equation is sound, this would be an attractive way of uniting the Greek and cuneiform evidence.

But how sound is this equation? Berossus' Akkadian name was for many years reconstructed as Bēl-rē'ûšu, 'the lord is his shepherd', or less frequently, Bēl-ušuršu, 'lord, protect him!' First proposed by Heinrich Zimmern in 1927, Bēl-rē'ûšu is derived from purely linguistic reasoning, working back from the various Greek attestations of Berossus' name (Βηρωσός; Βηρώσος; Βήρωσος; Βηρόσος).⁸⁸ By contrast, Van der Spek's Bēl-rē'ûšunu, 'the lord is their shepherd' is based on the fact

⁸⁶ *BNJ* 680 T2. ⁸⁷ De Breucker 2013: 16 n.8.

⁸⁸ Personal communication quoted in Lehmann-Haupt 1929: 129–30; cf. Lehmann-Haupt 1938: 2. A third possibility, Bēl-ušuršu (Beaulieu 2007: 119) is less likely linguistically; there would be no obvious motivation for the presence of rho in Berossus or the loss of the r in *ušur*.

that the name Bēl-rē'ûšu is not attested in Hellenistic cuneiform tablets, whereas Bēl-rē'ûšunu does occur, and in the attractive context of Esagila.⁸⁹ This suggestion has found favour among both Classicists and Assyriologists, such that it is now increasingly common to find it stated simply that Bēl-rē'ûšunu *was* Berossus' name.⁹⁰ But despite the small difference between the two, Bēl-rē'ûšunu is less plausible on linguistic grounds if other Greek renderings of Babylonian names are taken into consideration.

The first part of the name presents no difficulties. βηρ is the expected transcription for Bēl-r- (with Late Babylonian assimilation of l to a following r); the vowel/aleph sequence –ē'û contracts to a single long vowel, represented as Greek ω, and Akkadian š is reflected by Greek σ. The final part, with the suffix –*šu* or –*šunu*, is trickier. Since final short vowels were dropped in first-millennium Akkadian, Bēl-rē'ûšu would have been pronounced [bērōš], to which the Greek nominal suffix -ος could be added to give Βήρωσος. Bēl-rē'ûšunu, meanwhile, would have been pronounced [bērōšon]. Based on other Greek transcriptions of Akkadian, the *n* ought to be preserved: although there was never complete uniformity in the rendering of Akkadian words in Greek, stem-final consonants tend to be retained, with or without the addition of Greek case endings. Compare the following examples:

- *Šin-aḫḫē-erība* = Σαναχάριβος⁹¹
- *Nabû-kudurri-ušur* = Ναβοκοδρόσορος⁹²
- *Bēl-šunu* = βη[λ]σον⁹³
- *makkanû* = μαχανω⁹⁴

⁸⁹ Van der Spek 2000: 439.

⁹⁰ E.g. De Breucker 2011: 637; De Breucker 2013: 15; Dillery 2015: vii; Geller 2014a: 221; more cautiously Haubold 2013d: 142 n. 56.

⁹¹ Hdt. 2.141.

⁹² *BNJ* 68o F8a (Joseph. *AJ* 10, 137). It is always possible that the spelling of names in the Berossus fragments reflects the usage of the quoting author rather than Berossus himself, but in this case the alternative spelling Ναβουχοδοносός in Josephus' introductory comments (and the fact that Ναβοκοδρόσορος is closer to the Akkadian) makes it more likely that the spelling in the quotation goes back to Berossus.

⁹³ Geller 1997: 81 no. 15 rev. 1–2. This and the following are Greek transcriptions of Akkadian words from Hellenistic cuneiform tablets known as the Graeco-Babyloniaca, on which see further Section 3.3.

⁹⁴ Geller 1997: 70 no. 3 (BM 34799) rev. 4'.

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The final stem consonant is visible in the transcription, regardless of the number of syllables in the word or whether the consonant is preceded or followed by another short or long vowel. The example of Bēl-šunu/ βηλσον is particularly significant because it uses the same -šunu suffix as Bēl-rē'ûšunu. Although it is possible that [bērōšon] was interpreted as a Greek accusative from which a nominative Βήρωσος was formed, the linguistic evidence supports Bēl-rē'ûšu as more likely. The fact that there are Hellenistic attestations of one name but not the other has no real bearing on the question, given the hazards of survival. Overall, there are good chronological and linguistic reasons to doubt the equation of Berossus with Bēl-rē'ûšunu – *šatammu* or otherwise. The fact that he *had* an Akkadian theophoric name and a good grounding in cuneiform scholarship places Berossus among the priestly elite of Babylon and makes a connection with Esagila highly plausible. But his precise identification, occupation and relationship to the temple remain far from certain.

3.2 Beyond Berossus

Where does this leave us? On rather shaky ground with Berossus' career. The reassuringly solid character of Berossus the *šatammu* of the Esagila temple, who wrote the *Babyloniaca* for his Seleucid patron Antiochus I and later decamped to Cos to bring Chaldaean astronomy to the Greek world, fragments into a number of possible alter egos: a priest and scholar of Esagila whose detailed explanation of Babylonian astronomy has been lost to posterity due to the selectivity of his excerptors; a master of cultural translation who deliberately eschewed technical details and explained the cosmos for his Greek audience using concepts they could understand; a member of the Babylonian elite with some connection to the Esagila temple but no real knowledge of contemporary Babylonian astronomy; a man whose view of the heavens was informed more by Greek philosophy than Babylonian astral science; and hovering above them all a ghostly Pseudo-Berossus, fount of all astronomical and astrological knowledge and artefact of Greek

pseudepigraphers. If Berossus himself eludes us, how can we use him to guide our reconstruction of the worlds in which he lived and worked and the patterns of cross-cultural contact that linked them?

Regardless of Berossus' exact social and intellectual trajectories and his precise relationship to the Seleucid court, one thing is clear: he was an early Hellenistic scholar who was well versed in both Greek and Babylonian intellectual traditions. He wrote Greek and seems to have had knowledge of some Greek philosophical and historiographical texts. In addition, the precise correspondences between sections of the *Babyloniaca* and surviving Akkadian literary texts and inscriptions suggest that he was not simply drawing on local traditions about the Babylonian past, but also had specific training in cuneiform scholarship. This raises the question of the intellectual context that could produce someone like Berossus; was he an exceptional autodidact who broke from the cultural conservatism of the temple elite to embrace Hellenic learning alongside cuneiform scholarship, or does he happen to be the only surviving product of a bilingual education system common in Hellenistic Babylon(ia)? Potentially key to answering this question are an intriguing group of clay tablets from Babylon which constitute a third point of contact between Hellenistic Greek and cuneiform scholarship: the so-called Graeco-Babyloniaca, to which we now turn.

3.3 Bilingual Schooling in Babylon? The Graeco-Babyloniaca

'Graeco-Babyloniaca' is a name given by modern scholars to a number of clay tablets from Babylonia, many of them small and fragmentary. Most or all of them were probably written in Babylon, although none has a secure archaeological provenance and it is unlikely that they formed a single assemblage in antiquity. In size and shape they resemble typical cuneiform tablets, and the majority contain one or more extracts from Akkadian or bilingual Sumerian–Akkadian texts written in cuneiform on the obverse. If one turns the tablet over, however, there is a surprising twist: on the reverse there is a transcription

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(not a translation) of the same extract(s) in the Greek alphabet [Figure 3.1](#)).⁹⁵

A few tablets contain Greek transcriptions only and seem never to have been inscribed in cuneiform.⁹⁶ The transcriptions distinguish clearly between the phonology of Akkadian and Sumerian, and use conventions which are largely consistent across the corpus, suggesting an established system.⁹⁷ The transcriptions of Akkadian also share many features with other Greek transcriptions of Semitic languages from the Hellenistic and Roman periods, including the Septuagint, Origen's *Secunda*, and Greek inscriptions from Syria.⁹⁸

The Graeco-Babyloniaca tablets are, however, from a much lower intellectual level than the *Secunda* or the Septuagint: they are educational exercises. Their content and format align them with school tablets from the second stage of cuneiform scribal education in the first millennium BC.⁹⁹ In this stage, students who had mastered the writing of individual cuneiform signs and words moved on to copying extracts from word lists (monolingual Akkadian and bilingual Sumerian–Akkadian) and other core literary and scholarly compositions in both languages.¹⁰⁰ This is

⁹⁵ For overviews of the Graeco-Babyloniaca and their interpretation, see Sollberger 1962; Oelsner 1972; Knudsen 1990; Maul 1995; Geller 1997; 1999; 2012; Boiy 2004: 41–3; Westenholz 2007; Clancier 2009b: 245–53; Oelsner 2013. For details of editions, see page 124.

⁹⁶ The Leningrad tablet published by Schileico 1928; Ash. Mus. 1937.993; no. 18 in Geller 1997; perhaps also BM 38461 (cf. Westenholz 2007: 273).

⁹⁷ On differences between Akkadian and Sumerian phonology as reflected in the Graeco-Babyloniaca, see Sollberger 1962: 66; Westenholz 2007: 290–1. The only significant variations in the transcription of phonemes in the Graeco-Babyloniaca (excluding the Ashmolean tablet) are that *i* is sometimes transcribed with *ι* and elsewhere with *ει*, and that Akkadian *h* is sometimes rendered with a modified form of *ξ* (BM 34797 rev. 3; HSM 1137 rev. 1), sometimes omitted (BM 34799 rev. 6) and once probably represented with *χ* (BM 34798 rev. 8b; cf. Knudsen 1990: 152–4). Doubled consonants are sometimes indicated, sometimes not, just as in cuneiform. The variation in the transcription of final consonant clusters (in some cases preserved with dropping of the final vowel; in others resolved by an epenthetic vowel) may indicate phonetic development over time rather than orthographic variation (Knudsen 1990: 159–60).

⁹⁸ Cf. Burkitt 1902: 145 (Septuagint); Geller 1997: 64–8 (Origen); Westenholz 2007: 281–3 (all systems). As Westenholz observes, the Graeco-Babyloniaca, like the oldest part of the LXX, follow the system of indicating the pronunciation of words independently of the native spelling rather than that of ‘spelling pronunciations’ like Origen or the Greek inscriptions from Syria.

⁹⁹ Maul 1995: 11–13; Gesche 2001: 184–5. ¹⁰⁰ Gesche 2001: 172–83.

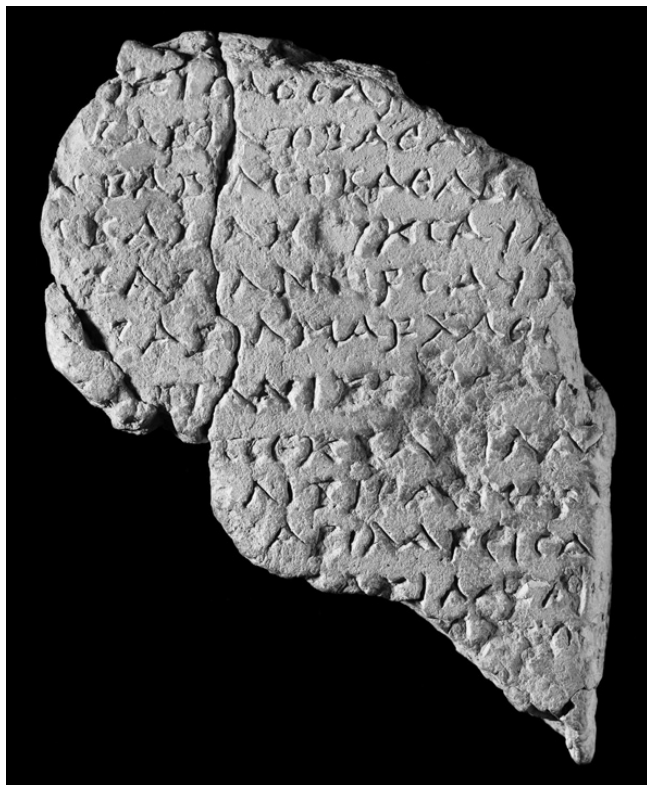


Figure 3.1 Graeco-Babyloniaca tablet (BM 34798) © Trustees of the British Museum

precisely the type of material found on the Graeco-Babyloniaca tablets. They include, for example, extracts from the bilingual lexical list Ur_5 -ra = *hubullu* dealing with words for directions, mathematical terms and different types of date palm; an incantation against the *utukku* demon; an excerpt from the *Hymn to Šamaš* (the sun god), and part of the topographical text Tin-tir = *Bābilu*, the so-called Description of Babylon.¹⁰¹ Three of the tablets are

¹⁰¹ Ur_5 -ra = *hubullu*: BM 34797, 35727, 34799 (Geller 1997 nos. 1–3); incantation: BM 34816 (Geller 1997 no. 11; Geller 2008); *Šamaš Hymn*: BM 33769 (Geller 1997 no. 12); Tin-tir = *Bābilu*: BM 34798 (George 1992 pl. 6). On the educational context, see Gesche 2001: 184.

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also dated on their top edge to the day and month but not the year, another characteristic feature of school texts which by their nature were not designed to be kept long term.¹⁰²

The physical relationship of the two scripts on the tablets is also indicative of a school context, and in addition suggests that the Greek transcriptions constituted or contained the main learning objective. Where the tablets contain both cuneiform and Greek transcriptions, the cuneiform on the flatter obverse was inscribed first, with the Greek following immediately on the reverse while the clay was still moist.¹⁰³ The tablets turn on the vertical axis like a modern book rather than on the horizontal axis like regular cuneiform tablets, in all likelihood to aid the student in switching between the cuneiform and the transcription (although some other scholarly tablets from this period also turn this way). The cuneiform is usually neatly written and free from errors, while the alphabetic renderings are of poorer quality. Although a few of the transcriptions are by proficient writers, many are in large, inconsistent hands with erasures and errors, features diagnostic of both cuneiform and Greek school exercises.¹⁰⁴ The contrast between the quality of the cuneiform and that of the Greek could indicate that the obverse was inscribed by a teacher, as is apparently the case with some earlier cuneiform exercise tablets where the same extracts are written neatly on the obverse and in a rougher and less competent hand on the reverse.¹⁰⁵ Alternatively, the student wrote both versions but was more proficient with cuneiform.¹⁰⁶

Depending on the classificatory criteria adopted, the Graeco-Babylonica corpus contains between sixteen and eighteen tablets, most of which are in the collections of the British

¹⁰² Gesche 2001: 43, 55, 184. The absence of the year in the dating formula is also characteristic of Greek school exercises (Cribiore 1996: 88–9).

¹⁰³ Westenholz 2007: 277.

¹⁰⁴ Errors in the Graeco-Babyloniaca tablets: Geller 2008: 2; Westenholz 2007: 291. Errors and erasures on cuneiform school tablets: Gesche 2001: 199–201; erasures in Greek school exercises: Cribiore 1996: 95–6.

¹⁰⁵ The phenomenon is mentioned in Maul 1995: 11, but no specific examples are given; it seems as if the relevant tablets date from the Old Babylonian period, which casts some doubt on their utility as comparanda in the absence of Neo- or Late Babylonian examples.

¹⁰⁶ Thus Gesche 2001: 184.

Museum. Theophilus Pinches and Archibald Sayce published the first five in 1902; Schileico's edition of an additional tablet from Leningrad followed in 1928. The next landmark was Edmund Sollberger's 1962 edition of the whole corpus (partially based on Pinches' unpublished notes), which added another eight tablets and coined the term 'Graeco-Babyloniaca'.¹⁰⁷ Further tablets were published by Markham Geller (with collations by Aage Westenholz), and Jeremy Black and Susan Sherwin-White.¹⁰⁸ As noted above, none of the Graeco-Babyloniaca has a secure archaeological provenance, but based on their acquisition history it is likely that most, if not all, originate from Babylon, and more specifically from Esagila or collections owned by its personnel.¹⁰⁹ None of the tablets has a year date, but one fragment from Berlin (VAT 418) was acquired in the same lot as a set of bilingual hymns from Babylon whose colophons do contain full dates: these give a range of 123–81 BC.¹¹⁰ Meanwhile, palaeographic dating on the basis of the Greek script has yielded various ranges between the second century BC and second or third century AD (although a systematic palaeographical study has never been undertaken). We will return to this issue in [Section 3.3.3](#).

¹⁰⁷ Pinches 1902; Sayce 1902; Schileico 1928; Sollberger 1962.

¹⁰⁸ Geller 1983; 1997; 2008; Westenholz 2007; Ashmolean tablet: Black and Sherwin-White 1984; re-edited by Maul 1991 and Knudsen 1995. It is unclear whether Ash. Mus. 1937.993 should be classified with the Graeco-Babyloniaca. It is a different shape, size and format from the other tablets, and cannot be interpreted using the usual transcription conventions. Black and Sherwin-White (1984) and Geller (1997) suggested that the language was Aramaic but could not make sense of the text. The most convincing reading to date is that it is a bilingual Sumerian-Akkadian incantation, a theory proposed by Maul 1991 and developed further by Knudsen 1995, who explained some of the irregularities as Aramaisms. However, as noted by Geller (1997: 84), this reading requires a departure from the transcription rules of the other Graeco-Babyloniaca tablets, and he and Westenholz (2007: 263) exclude it from the Graeco-Babyloniaca corpus, as well as the additional clay tablet in Greek script from a private collection (Geller 1997 no. 18) which has been analysed as an Aramaic text by Krebernik 2002.

¹⁰⁹ The thirteen British Museum tablets come from the Spartali II and III and 81–7–6 collections, bought from dealers in the 1870s and 1880s during Rassam's excavations at Babylon (Reade 1986: xiv–xv; Westenholz 2007: 274). These collections were assigned by Clancier to the 'library' of the Esagila temple (Clancier 2009b: 248), but since Esagila itself has never been fully excavated (cf. page 174) it is likely that these tablets come from houses or storerooms of priests or other temple personnel.

¹¹⁰ The hymns are published by Reisner 1896.

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The Graeco-Babyloniaca tablets are on the one hand of great linguistic interest for Assyriologists. As Francis Burkitt noted at the time of their first publication, the Greek transcriptions do not simply transliterate the cuneiform signs, but instead offer a phonetic rendering; this provides insight into the pronunciation of Akkadian and Sumerian at the time, long after both had ceased to be spoken in everyday life.¹¹¹ Studies of the Graeco-Babyloniaca transcriptions have confirmed certain linguistic features of Late Babylonian Akkadian and revealed others which were not detectable from cuneiform alone.¹¹² On the other hand, the tablets are also of interest for what they might reveal about cross-cultural interaction in Hellenistic and Parthian Babylonia. With cuneiform and Greek inscribed on opposite sides of the same tablet, they are unmistakable evidence of contact between Greek and Sumero-Akkadian intellectual traditions. It is here, however, that the difficulties begin, for despite more than a century of scholarship on the Graeco-Babyloniaca, much beyond the basic facts outlined above – their writers and readers, their purpose, their broader social and intellectual context – remains uncertain.

3.3.1 *Students: but Greek or Babylonian?*

The key question concerns the creators and users of the Graeco-Babyloniaca: who wrote these tablets and why? In his 1902 edition Pinches confidently stated that the writers must have been Greek, for ‘A native Babylonian would not have needed transcriptions, and the writer is hardly likely to have been a Grecised Babylonian learning his own language by means of the Greek alphabet’.¹¹³ These tablets, he thought, represented the work of Greek students attempting to master traditional Babylonian scholarship, and this was the consensus for the next half century; in his 1962 edition, Sollberger reiterated Pinches’ position with equal conviction: ‘They are obviously school texts written by some Greek student,

¹¹¹ Burkitt 1902: 144–5.

¹¹² Pinches 1902; Burkitt 1902; Ungnad 1923; Knudsen 1990; Geller 1997: 64–8 and passim; Westenholz 2007: 283–91.

¹¹³ Pinches 1902: 113.

or students, of Sumerian and Akkadian'.¹¹⁴ If this interpretation is correct, the Graeco-Babyloniaca would offer striking evidence for (some) Greek speakers' engagement with Babylonian scholarship.

Ten years after Sollberger's edition, however, Joachim Oelsner published an article which challenged the Greek thesis and tipped the balance decisively towards the opposite interpretation: that the writers were in fact Babylonians whose first language was Aramaic, learning to reproduce Akkadian and Sumerian in Greek letters. The Greek alphabet was used instead of the Aramaic, on this view, because it could express features that were *not* clear from the cuneiform spelling, like vowel length and quality.¹¹⁵ In support of his reconstruction, Oelsner highlighted the presence of Akkadian names (and absence of Greek names) on the tablets and the fact that, according to the acquisition data, they came from the same buildings as cuneiform tablets which *were* definitely written by Babylonians: the storerooms or houses of scholars associated with Esagila.¹¹⁶ Moreover – and probably not coincidentally at a time when theories of cultural isolationism/apartheid were on the rise in Hellenistic studies more broadly – Oelsner was very sceptical of the likelihood of Greeks of this period learning cuneiform. Aramaic and Greek were the languages of administration and everyday life in Hellenistic Babylonia, and Akkadian and Sumerian were only used in scholarly and liturgical contexts; what incentive would Greeks have to learn them?¹¹⁷

Oelsner's objections are persuasive, and nearly all subsequent discussions have followed his interpretation.¹¹⁸ In addition to the

¹¹⁴ Sollberger 1962: 63. Cf. Sayce 1902; Burkitt 1902: 144. Schileico already seems to have taken the Leningrad tablet (inscribed only in Greek) as evidence for Babylonian priests using the Greek alphabet (Schileico 1928: 10).

¹¹⁵ Oelsner 1972. ¹¹⁶ Oelsner 1972: 358.

¹¹⁷ Oelsner 1972: 357–8. Unlike previous Assyriologists who had examined the tablets, Oelsner specialised in the Hellenistic period and engaged with scholarship on the wider Hellenistic world to a greater extent. Already in the 1940s Rostovtzeff had argued that the cultural unity of the Hellenistic world was limited to its thin Hellenic veneer (Rostovtzeff 1932: 150), but in the wake of modern decolonisation similar ideas became particularly prevalent in Classical scholarship in the 1970s and 1980s; Momigliano's *Alien Wisdom*, the classic articulation of Greek lack of engagement with other cultures, appeared just a couple of years after Oelsner's article (Momigliano 1975).

¹¹⁸ Black and Sherwin-White 1984: 138–9; Knudsen 1990: 150–1; Maul 1995; Geller 1997: 48. Only Gesche (2001: 185), Scholz 2008 and more equivocally Dalley (1998: 40–1), have continued to entertain the Greek thesis.

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lack of incentive for Greeks to learn Akkadian, everything known about the context of the tablets suggests a social and cultural milieu in which it would be very unlikely to find Greeks: temple scholarship was the domain of a restricted elite who kept their expertise and privileges within close-knit family circles. Babylonians who did not belong to these circles would have been unlikely to gain entrance, let alone foreigners, and the repeated contact required to give rise to the development of a systematic educational practice is particularly improbable. Linguistic support for Oelsner's interpretation was offered by Ebbe Knudsen, who detected signs of Aramaic influence in the Akkadian of the Graeco-Babyloniaca and argued that these reflect the mother tongue of the scribes.¹¹⁹ Further pieces of evidence against native Greek speakers being the students are the lack of Greek *translations* and the fact that no tablets with Greek script are attested from the first stage of the curriculum, both of which one would expect to find if the object was for foreign speakers to learn Akkadian.¹²⁰

On balance, then, it seems most probable that the writers are Babylonians: the offspring of the temple elite whose writings dominate Hellenistic cuneiform scholarship. These students may have grown up to produce such texts themselves and become the next guardians of the ancient intellectual heritage of Mesopotamia. At the beginning of their scribal careers, however, they utilised the script of their foreign rulers to master the pronunciation of the long-dead languages which preserved that heritage. This suggests an early and deep engagement with Greek language (and potentially also Greek culture) among the temple elites of Babylon(ia) whose cuneiform writings show them at their most culturally conservative.

3.3.2 *The Purpose of the Tablets*

While there is basic agreement among modern scholars that the students were using the Greek alphabet to render the sounds of

¹¹⁹ Knudsen 1990: 155–61; Clancier 2009b: 249, but Westenholz 2007: 283–7 is sceptical about the evidence for Aramaic influence. It is also possible that Aramaisms in the corpus reflect Aramaic influence on the standard pronunciation of Akkadian rather than the language of individual scribes.

¹²⁰ Clancier 2009b: 249; Oelsner 2013: 162

Akkadian and Sumerian, theories about the exact purpose and broader context of the Graeco-Babyloniaca tablets vary. One is that the Greek transcriptions are a basic teaching tool. Aage Westenholz, followed by Philippe Clancier, argues that students first learnt Akkadian and Sumerian in Greek transcription alone before moving on to cuneiform and eventually being weaned off the transcriptions.¹²¹ In support he adduces the two tablets inscribed only in Greek, which contain prayers to the god of learning, Nabû, and resemble Neo-Babylonian school exercises dedicated as votives at the temple of Nabû-ša-harê in Babylon and the temple of Nabû at Borsippa. The votive tablets are nearly all elementary exercises, perhaps dedicated at the conclusion of the students' initial training, and Westenholz views the tablets in Greek script as instances of the same practice, with the rest of the Graeco-Babyloniaca representing the next stage of the curriculum.¹²² Clancier emphasises to a greater extent the ongoing mastery of Greek as a pedagogical objective, but his statement that the Graeco-Babyloniaca students are 'practising' writing and reading Greek, and 'learning' to read and pronounce cuneiform implies that Greek was the prior script.¹²³

If Akkadian was first studied in Greek transcription, these students must have known Greek, or at least the Greek alphabet, *before* they learnt cuneiform (and presumably after Aramaic).¹²⁴ Had they had learnt Greek at home, or attended a Greek school prior to starting their study of Akkadian in the traditional temple schools? Or did the temple education system itself now begin with Greek? On any of these reconstructions, a high level of engagement with Greek culture must have existed among the

¹²¹ Westenholz 2007: 274–80; Clancier 2009b: 248–53.

¹²² Westenholz 2007: 274. Nabû-ša-harê: Cavigneaux 1981a: 122; Cavigneaux 1981b. Borsippa tablets: Cavigneaux 1996. As the prayers on these school tablets correspond to those written in the colophons of library tablets, they are often referred to as 'colophons', but as Westenholz rightly points out (2007: 276 n.13) Schileico's 'Weih-text' is more accurate.

¹²³ Clancier 2009b: 251: 'Le stade est celui d'élèves maîtrisant la lecture et l'écriture du grec et apprenant la lecture du cunéiform ainsi, évidemment, que sa prononciation.'

¹²⁴ Although it is not impossible that students were exposed to the Greek script purely for the purposes of transcription, it is less likely that it would be chosen as a teaching tool unless the students were already familiar with it.

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Babylonian temple elite – a social group who have often been seen as culturally conservative, despite the increasing prevalence of Greek names in certain families during the Hellenistic period.¹²⁵

For Oelsner (followed by Geller) the Greek transcriptions are also an indication of deep engagement with Greek culture, but in a different way. Rather than representing a transitional stage aimed at helping Greek-speaking students to master Akkadian and Sumerian, the Graeco-Babyloniaca were designed to train aspiring Babylonian scholars to write Akkadian and Sumerian texts in alphabetic scripts – a practice which, Oelsner suggested, was common in Late Babylonian scholarship but is largely invisible to us due to the loss of all the parchment and papyrus on which these texts were written.¹²⁶ Greek was thus not a teaching tool but the target script, a potential vehicle for the wider transmission of Babylonian scholarship in a period when knowledge of cuneiform was dwindling and alphabetic scripts had long been the norm outside the temples. On this model, we would not need to assume that all members of the priestly families were immersed in Greek from an early age, but rather that a series of scholars saw the advantages of the Greek alphabet in terms of accessibility and phonetic transparency and considered it a potential vector for the future transmission of their intellectual heritage.

With few surviving exemplars and in the absence of further contextual information, it is difficult to choose decisively between these interpretations. The difficulty with Oelsner's model is simply a lack of evidence, both for alphabetic writings of Akkadian and Sumerian and for the writing of these languages on perishable media more generally. As Westenholz has observed, most of the examples cited as evidence for the writing of Akkadian on parchment are equivocal or more likely to refer to Aramaic or even Greek texts.¹²⁷ If there had been a transfer of script, one might also expect that more of Sumero-Akkadian intellectual culture would

¹²⁵ On the onomastic choices of the Babylonian elites under Hellenistic and Parthian rule, see Monerie 2014: 74–86 with earlier bibliography.

¹²⁶ Oelsner 1972: 359–63; Geller 1997: 48–9; Geller 1999; Oelsner 2013.

¹²⁷ Westenholz 2007: 278–9.

have survived the end of cuneiform, rather than selected elements which were almost certainly transmitted via translation into other languages.¹²⁸

The idea that Babylonian students used Greek transcriptions as part of their early studies in Akkadian and Sumerian does not require such a leap of faith in terms of the broader historical context, and offers the more economical explanation for the surviving evidence. Yet this model is not without its problems either. One is that the Graeco-Babyloniaca contain texts from the *second* stage of scribal education, whereas monoscript cuneiform tablets from the first stage continue to be attested in Babylon during the Hellenistic and Parthian periods, suggesting that the Greek script was introduced later.¹²⁹ This is not a decisive factor, however: the absence of elementary tablets in Greek could be due to initial exercises in Greek script being written on perishable media, or simply to the accident of preservation (the Graeco-Babyloniaca themselves are hardly numerous). Indeed, the Greek script of the Graeco-Babyloniaca tablets, although in many cases not very practised, does not seem to be that of total beginners. Following Raffaella Cribiore's typology of Greek school hands, there are no examples of the 'zero-grade' hand of very early learners; most of the tablets are in the 'alphabetic' or 'evolving' hands, the latter of which could persist for years.¹³⁰ Whether or not they had

¹²⁸ *pace* Oelsner (2013: 163) who suggests that transcriptions of Akkadian texts in Greek script on rolls of papyrus or leather played a not insignificant role in the transmission of Babylonian learning to the Hellenistic world; this still presupposes that Greeks learnt Akkadian (without cuneiform), for which we have no evidence.

¹²⁹ The British Museum collections house several thousand Neo-Babylonian or Late Babylonian school tablets from Babylon, most studied and/or published in Gesche (2001); these include many tablets from the first level of the curriculum. In most cases it is impossible to date individual tablets more precisely, but three (BM 56601, 56604 and 66957+) are securely Hellenistic because they contain the name of Philip Arrhidaios, and Boiy has identified several further tablets which seem to come from the same group of texts (Boiy 2004: 39). One might adduce here comparative evidence from Ptolemaic Egypt: Willy Clarysse has argued that bilingual Egyptian scribes still performed initial calculations in Demotic, which suggests that Greek was introduced after Demotic in temple schools (pers. communication 2013). Yet the Egypt parallel is not exact; Egyptian was these scribes' first spoken language, while the Babylonian students did not speak Akkadian as a native language but may well have spoken Greek, on which basis we would expect to find the Greek first.

¹³⁰ Cribiore 1996: 112: the zero-grade hand is characterised by confusion of or peculiar writings of letters, and is often 'severely multistroke'. Most of the Graeco-Babyloniaca

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previously been using the Greek alphabet to write Akkadian and Sumerian, the Graeco-Babyloniaca students do not seem to be encountering the script for the first time.

A more serious issue with the idea that students began studying Akkadian and Sumerian in Greek script is that the Greek alphabet would not be an ideal tool for teaching either Akkadian and Sumerian language or the cuneiform writing system *ab initio*. Although, as has often been stated, the Greek alphabet can render distinctions of vowel quality and quantity which are not made in the cuneiform script, it cannot represent the three different *s*-sounds of Akkadian, /s/, /š/ and /ṣ/, which in the Graeco-Babyloniaca are all transcribed using Greek sigma.¹³¹ Similar problems arise with /ḥ/; although some of the Graeco-Babyloniaca render this with a modified form of ξ, in other tablets it is simply omitted.¹³² In order to know which sound is represented in any given case, one must already know the Akkadian or Sumerian word. A writing system which could not render all the phonemes of a language would be of limited utility for a student just starting out. Nor does Greek have a way of rendering purely logographic signs such as determinatives (the ‘ditto’ sign MIN, which did not have a phonetic value, is simply omitted in the Greek transcription on HSM 1137), or distinguishing between different sign values, making it a poor vehicle for teaching the cuneiform script.¹³³ On the other hand, for students who already had a basic familiarity with both the languages and the cuneiform script it would be an ideal way of teaching finer phonological gradations; if uncertain about the consonant value they could refer to the cuneiform, while the Greek transcriptions provided more detailed guidance on vowel length and quantity.

Importantly, the possibility that the cuneiform and Greek transcriptions functioned as mutually reinforcing encourages us to

show characteristics of either or both the alphabetic hand (accurate but slow and multistroke) or evolving hand (clumsy and with mistakes in alignment but moderately fluent). The fragmentary state of the tablets makes it difficult to classify the hands; there are rarely multiple examples of the same letter by which to assess consistency, and the short letter sequences do not provide much insight into overall spacing and alignment.

¹³¹ Westenholz 2007: 279. *š* is sometimes transcribed with ζ. ¹³² See n.97.

¹³³ Clancier 2009b: 250 (focusing on the linguistic impoverishment caused by the transcription process).

consider the two scripts on the tablets as complementary rather than primary and secondary. This leads to a third interpretation which combines elements of Oelsner and Westenholz's models. Existing theories about the purpose and cultural significance of the Graeco-Babyloniaca seem to assume a one-way cultural transfer – either the 'Babylonianisation' of Greeks who wished to learn Akkadian, or the 'Hellenisation' of the Babylonian priestly elite who needed to learn and transmit their own heritage via Greek transliteration. But it may be more useful to consider them in terms of education in a bilingual, or rather multilingual society.¹³⁴

It is clear from Akkadian-Greek double names, the transliteration of Greek terms in cuneiform and the simple necessity of liaising with the royal authorities that many high-ranking Babylonian scribes and officials attested in the cuneiform record must have been able to speak and write Greek. Yet we know very little about how they learnt it. One plausible model, which fits the Graeco-Babyloniaca quite well, is that Greek language and script were introduced into the traditional temple education system *alongside* Akkadian and Sumerian and cuneiform script, rather than as an introductory tool or with the aim of transferring a body of knowledge from one writing system to another. Individuals who might later hold important posts in temple or city administration in the Seleucid or early Parthian period would have needed to be able not only to write the languages of Akkadian, Aramaic and Greek in their respective scripts, but also to transcribe names and important terms from one to another in a consistent manner. As the Graeco-Babyloniaca utilise a modified form of the Greek alphabet, they could not be used in isolation to train scribes to convert between scripts, but they might certainly be part of the process, designed to teach students the pronunciation of Akkadian and Sumerian *and* a systematic means of transcribing them in Greek letters. Such a system could have supported a scholarly transcription programme of the kind envisaged by Oelsner. More importantly, however, it would have promoted consistency and clarity in administrative practice and general usage. In fact, traces of the

¹³⁴ Clancier 2009b: 251.

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transcription system of the Graeco-Babyloniaca are visible in Berossus' rendering of Mesopotamian names, and in some transcriptions of Greek names in Hellenistic cuneiform texts.¹³⁵

It may be, then, that the Graeco-Babyloniaca represent neither a transition from Greek transcription to cuneiform, nor from cuneiform to Greek transcription, but a part of an educational process in which two scripts and at least three languages had their place. Our writers have some previous exposure to Greek script (and presumably also to the language). They also know some Akkadian and Sumerian, either via Greek transcription, or more likely, using cuneiform in the traditional manner. At the second level of the curriculum they are now beginning to refine their pronunciation of these languages, but also their competence with Greek and cuneiform scripts and their ability to switch between them. Their monolingual exercises in Greek language and literature would have been done on leather or papyrus, and they may also have written Akkadian and Sumerian texts on these media later. But the Graeco-Babyloniaca represent their initial forays in converting between the scripts, languages and cultural worlds in which they operated.

3.3.3 *Systematic Educational Practice or Short-Lived Experiment?*

The second question which has long plagued scholars dealing with the Graeco-Babyloniaca is, when were they written? Do they represent a short-lived experiment or a standard practice? Despite variability in the suggested dating of individual tablets, all published editions have dated the Graeco-Babyloniaca corpus as a whole across a range of at least 100 years, and at most almost 400: ca. 140–80 BC (Sayce); second to first century BC (Sollberger); ca.

¹³⁵ On Berossus' system of transcriptions, see Black and Sherwin-White 1984: 136 n.32; Chapter 6 on place names. In transcriptions of Greek names and terms in Hellenistic cuneiform texts, it is striking that the aspirated stops φ θ χ are often rendered with the unemphatic *p t k* and the unaspirated τ and κ with the emphatics *ṭ* and *q̣*, following the same equivalences as the Graeco-Babyloniaca (π is rendered by *p* since Akkadian had no emphatic labial stop). However, there are numerous exceptions, including royal names, and overall the rendering of Greek names in Akkadian seems never to have become fully standardised. See further Monerie 2014: 41–3; Monerie 2015: 350, n.7.

50 BC–AD 50 (Westenholz); second century BC to first century AD (Knudsen); second century BC to second or third century AD (Geller).¹³⁶ More recent scholars have tended towards later dates within this set; the earliest posited date is the second century BC, but most tablets have been assigned to the first century BC or AD, with the Harvard Museum tablet dated by Geller to the second century AD or even later.

These datings, if correct, would have two important consequences for our understanding of cross-cultural interaction in Hellenistic Babylonia. First, any of the proposed date ranges would suggest that writing Akkadian and Sumerian in Greek script was not an isolated experiment, and that the Graeco-Babyloniaca represent the few surviving witnesses to a relatively long-standing educational tradition in Seleucid and Parthian Babylon.¹³⁷ Second, if the very late datings stand, the latest Graeco-Babyloniaca tablet(s) would postdate our latest datable ‘proper’ cuneiform tablets (which come from the mid- to late- first century AD), making them the latest extant texts in Sumerian and Akkadian.¹³⁸ In this reconstruction, a level of bilingualism was embedded into the scribal curriculum in the Seleucid period – perhaps as a means of teaching pronunciation to students already familiar with Greek; perhaps also as a vehicle for the wider transmission of Akkadian and Sumerian texts in a context where cuneiform was becoming obsolete – and endured for several centuries, long after the Parthian conquest.

Unfortunately, the existing datings are not secure. As we have seen above, the only tablet which can be roughly dated by its relationship to other tablets is the Belin fragment. With Late Babylonian cuneiform palaeography as yet an underdeveloped

¹³⁶ Sayce 1902: 120; Sollberger 1962: 63; Westenholz 2007: 274; Knudsen 1990: 149–50; Geller 1997; 1999.

¹³⁷ The lack of other surviving examples would not be surprising given the recycling of school tablets in antiquity, the loss of perishable media on which further exercises in the Greek alphabet might have been written, and the fact that many of the Hellenistic tablets from Babylon came from unofficial excavations in which large, complete tablets were sought for the antiquities market, and smaller fragments might be overlooked.

¹³⁸ The latest dating so far suggested for a cuneiform tablet is 79/80 AD for W23340a, an astronomical almanac from Uruk, although the date is not without difficulties. On this tablet, and the five others that have been dated to the first century AD (all astronomical texts), see page 370 with n.2.

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field and insufficient linguistic evidence to provide an independent chronology, the primary dating criterion so far has been the Greek script.¹³⁹ But although various editors have referred in their publications to having consulted colleagues with expertise in Greek palaeography, there has never been a systematic study of the corpus by a Greek palaeography specialist.¹⁴⁰ Furthermore, good-quality photographs of the tablets have rarely been available, and the published copies of the tablets – which in at least one case were certainly what the Greek palaeographers were working from – have been made by Assyriologists, who have not always succeeded in rendering the Greek script correctly.¹⁴¹

A couple of examples will illustrate this problem. First, when compared with a photograph, Geller's hand copy of BM 37526 (Figure 3.2) fails to capture the joins between iota and mu in lines 2 and 4, or the nu which protrudes above the line in line 4; the shapes of the sigmas in the final line are misleading (the first is too elongated and compressed; the second is too small and incorrectly positioned in relation to the following beta), and the copy does not accurately convey the overall spacing and alignment of the letters.

In the case of another British Museum tablet, BM 33769, both Sollberger's and Geller's copies are problematic (Figure 3.3). Sollberger inaccurately renders the rho in line 1: although the letter is damaged, the middle stroke is horizontal (as copied by Geller) rather than curving downwards, and the upper loop is not quite closed; as a whole the letter is similar to the rho resembling

¹³⁹ Knudsen 1990 adduces a number of linguistic features which may indicate relative chronology, but *after* establishing a classification based on the palaeography. The linguistic elements – differences in the rendering of *h* and varying levels of Aramaic influence – are suggestive, but could equally reflect synchronic variation, and the patterns are based on very few examples. Cuneiform palaeography is now a growth area, thanks in part to the advent of more sophisticated scanning and imaging techniques (see Weeden 2018 for a brief survey of the field). Identifying diagnostic features for dating in Neo- and Late Babylonian cuneiform remains a challenge due to the overall stability of the script, but Jursa 2015 includes some promising findings with particular signs. Further work here may prove useful for the dating of the Graeco-Babyloniaca.

¹⁴⁰ Geller 1983: 114; Westenholz (2007, n.3) mentions scepticism from Greek palaeographers.

¹⁴¹ Knudsen (1990: 149) explicitly states that he showed Pinches' and Sollberger's copies to a palaeographer.

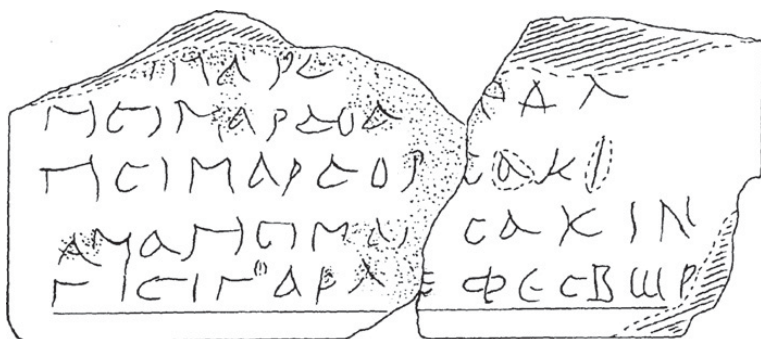
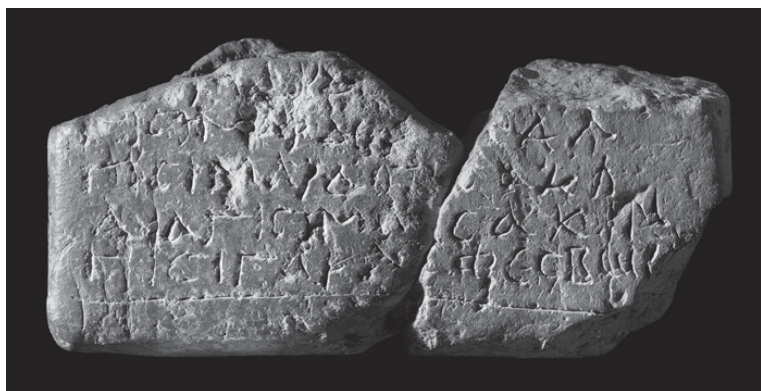


Figure 3.2 BM 35726 with hand copy by Geller (1997). Photograph © Trustees of the British Museum; Geller's copy © De Gruyter.

a digamma which occurs in the 'Description of Babylon' tablet. In line 2 a hole in the tablet is mistakenly copied by Sollberger as part of the upsilon (cf. the second upsilon in the line below), and in the final line the shape of the beta is incorrect and the following alpha is positioned too low in relation to it (on the tablet, the two letters are aligned at the top but the base of the alpha is some way above the line). In Geller's copy Sollberger's error with upsilon is corrected and the rho is better, but the sigma in line 1 is given a lower horizontal stroke not visible on the tablet, the strokes of the omicron in line 2 are incorrect (the downward diagonal stroke

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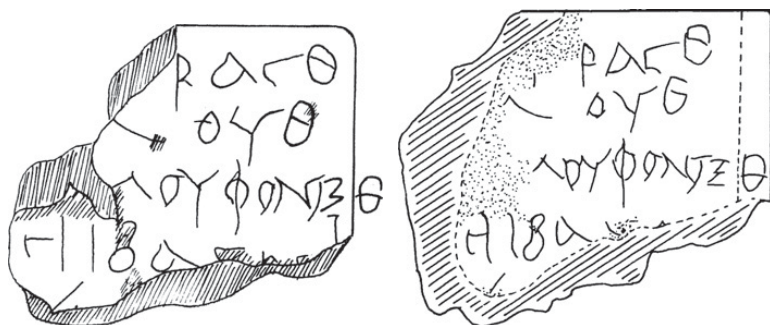
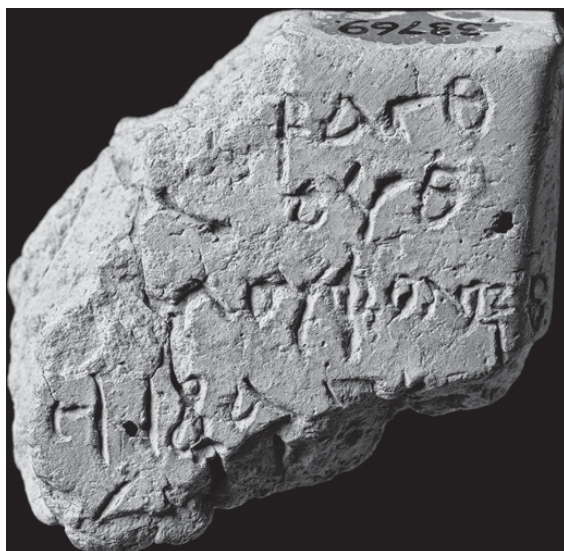


Figure 3.3 BM 33769 with hand copies by Sollberger (1962) (left) and Geller (1997) (right). Photograph © Trustees of the British Museum; Sollberger's copy © Cambridge University Press; Geller's copy © De Gruyter.

rendered by Geller is not a single stroke and is interrupted by the horizontal which either marks the beginning of a single-stroke rounded letter or an additional flourish; Sollberger is closer here), ϵ_1 in the final line is copied with a ligature when in fact the two letters do not touch, and again the overall

spacing and alignment of the script are not faithfully rendered. Any or all of these features could be significant for dating, and these problems with the existing copies cast doubt on any dates drawn from them.

Even where dates have been based on photography or collation, there are difficulties with how what is visible has been interpreted. First, the diagnostic features are sometimes fragile and/or vague. In particular, Geller and Knudsen date tablets later on the basis of more cursive hands, but while more cursive letter forms often develop later within a given writing style, they do not necessarily indicate a very late date.¹⁴² In many cases the exact grounds for preferring one date over another are not stated at all.¹⁴³

Another set of problems arise from the comparanda used for dating. Since Greek inscriptions on clay are rare, most of the palaeographic datings have been based on comparisons with texts written on other media, usually stone or papyrus. This immediately raises a question about comparability; although the Graeco-Babyloniaca show that it is possible on clay to create letter forms similar to those found in papyrus and other media, the medium will certainly have influenced the hands. A more serious problem with the comparanda is their genre and provenance. Almost all the published dates for the Graeco-Babyloniaca have been determined on the basis of comparison with papyri from Graeco-Roman Egypt and/or Herculaneum, and mainly literary papyri at that.¹⁴⁴ Only the editors of the Leningrad and Ashmolean Museum tablets explicitly took into account the scanty but crucial record of Greek

¹⁴² E.g. Geller 1997: 86: 'a cursive Greek handwriting which suggests a first cent. AD script ... a very cursive handwriting which may well suggest dating this tablet to the second cent. AD, or even later'; Knudsen 1990: 150: 'The evidence of palaeography suggests a division ... into three groups: an early group characterized by a non-cursive handwriting and lack of ligatures, an intermediate group with some later forms of letters and a few cursive features, and a late group with a more cursive handwriting and use of a few ligatures.'

¹⁴³ E.g. Sayce 1902: 120: 'On palaeographical grounds the fragments cannot be referred to an earlier date than the end of the second century BC'; most of Geller 1997's palaeographical datings lack specific justification.

¹⁴⁴ All comparanda stated in Geller 1983, Geller 1997 and Knudsen 1990 are papyri, and the palaeographers they mention consulting were papyrologists.

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texts from the Hellenistic East such as the jar inscriptions or skin texts from Bactria.¹⁴⁵ Graffiti and school texts, which are probably the most apposite comparanda, seem never to have been systematically taken into consideration. It is doubtful to what extent we can judge any of the Graeco-Babyloniaca, school exercises written on clay, by the standards of literary hands on papyrus from later Italy, or even contemporary Egypt. Indeed, the fact that these are school texts has serious consequences for any attempt to date them on palaeographical grounds. Cribiore has stressed the difficulty of dating the hands of Greek school exercises from Egypt, both because school hands tend to be stylistically conservative and because of the incomplete proficiency of the writers. The same considerations apply here.¹⁴⁶

All this has led to not only questionable but sometimes highly divergent datings of individual Graeco-Babyloniaca tablets: for example, the ‘Description of Babylon’ tablet was dated by Black and Sherwin-White and Knudsen to the second century BC but by Geller to the first century AD.¹⁴⁷ Overall, a full palaeographical study of both the Greek and the cuneiform which draws on a broader range of epigraphic comparanda and emphasises material from school contexts is an urgent desideratum.¹⁴⁸ Such a study is beyond the scope of this chapter, but it is possible to make a few preliminary observations. The first is that it is likely correct that none of the tablets are from the third century BC. They do not exhibit any letter forms particularly characteristic of late fourth or third century papyri and inscriptions such as wide and shallow *mu*, *nu* with the right leg rising above the upper line, small *omicrons* and *thetas*, *omega* with a straight line for the second loop, or *tau* without the right cross-bar (papyri only).¹⁴⁹ Nor does the overall orientation of

¹⁴⁵ Schileico 1928: 11; Black and Sherwin-White 1984: 134–5 (by far the best discussion of palaeographical dating of the tablets in print).

¹⁴⁶ Cribiore 1996: 117.

¹⁴⁷ Black and Sherwin-White 1984: 143; Knudsen 1990: 150; Geller 1997: 82.

¹⁴⁸ Thus also Oelsner 2013: 150, after discussing the inconclusive nature of existing datings: ‘Sicher wäre es nützlich, wenn von Seiten der griechischen Epigraphik die Frage noch einmal aufgegriffen würde’.

¹⁴⁹ Kenyon 1899: 37–8; Harrauer 2010 Textband: 160 (*mu* – see especially nos. 1–6), 162 (*nu* – see nos. 1–5), 168 (*tau* – see nos. 1–4); the examples for the other letters in Harrauer are less helpful. There was also consensus on this point

the script match the strong upper line typical of third-century papyri and inscriptions.¹⁵⁰

The second observation is that the very late datings are vulnerable. For instance, Geller pushes HSM 1137 from the terminus post quem of the first century AD given by the papyrologist he consulted into ‘the second century or even later’ because the hand is more cursive than other tablets in the corpus, but a more cursive script in an educational context may simply reflect an increase in proficiency.¹⁵¹ Indeed, it is doubtful whether anything in this tablet indicates an AD date at all. It does not display any letter forms usually taken as strong indicators of such a late date, such as the epsilon with cross-bar attached to the upper curve, the ‘tumble-down’ sigma (non-literary), the single-stroke xi or the eta that resembles upsilon (literary), which are characteristically found in Roman period papyri.¹⁵² The single-stroke alpha found on the tablet is typically seen in literary papyri from the Roman period, but also occurs in earlier documentary texts, including the Hellenistic parchments from Avroman published by Ellis Minns, while the xi with three disconnected strokes is characteristic of Ptolemaic rather than Roman papyri.¹⁵³

If the late date for this tablet falls, so too does the hypothesis that the Graeco-Babyloniaca must postdate our latest

among the participants at a meeting of papyrologists in London in March 2011, where images of the tablets were presented for discussion. I am grateful to all participants, especially Alan Bowman, Todd Hickey, Dominic Rathbone and Dorothy Thompson for generously offering thoughts on the dating of several of the tablets, and in particular to Katelijn Vandorpe for sharing with me her own examples of various letter forms and discussing questions of dating in more detail.

¹⁵⁰ See e.g. Harrauer 2010 Tafelband: Abb. 7, 8, 10–12, 14, 17 (which also display many of the characteristic third-century letter forms discussed above). This feature is principally characteristic of Ptolemaic papyri, but also occurs in the Greek versions of the edicts of the Indian ruler Aśoka found at Kandahar (on which see further pages 154–6), which are securely dated to the late fourth or early third century BC, and the skin texts from Bactria (Clarysse and Thompson 2007: 274) dated to the third or early second century BC.

¹⁵¹ Geller 1997: 86.

¹⁵² Kenyon 1899: 42–4; Harrauer 2010 Textband: 153 (epsilon – see nos. 9, 11, 15, 21), 156 (eta – see nos. 10, 13, 16), 167 (sigma – the first letter in 7 exemplifies the ‘tumble-down’ form).

¹⁵³ Kenyon 1899: 74; Minns 1915: 26; Harrauer 2010 Textband: 164 (xi – see no. 1).

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cuneiform texts. Several of the tablets which have been assigned to the first century AD also seem equally likely candidates for a first century BC date. In the ‘Description of Babylon’ tablet, for instance, the rounded letter forms find parallels in texts from the second and first centuries BC, and the relatively shallow forms of mu and lambda with both sides of equal length are more common in these centuries than in the first century AD, where the right stroke of the lambda tends to protrude above the apex of the letter and the middle strokes of mu descend to the line.¹⁵⁴ Overall, the palaeographically derived dates proposed by the earliest scholars to work on the Graeco-Babyloniaca corpus (late second to early first century BC) seem most plausible, and have the further advantage of tallying with the only contextual data available: the bilingual hymns with which VAT 418 was found, which date to precisely this period.

If the late datings no longer stand and the Graeco-Babyloniaca do not postdate the rest of our cuneiform texts, it is also less likely that they attest to a shift in writing medium for Akkadian and Sumerian texts in the twilight of traditional Babylonian scholarship. The evidence for differences in date and the consistency of the transcription conventions make it unlikely that the tablets are a short-lived experiment by one or two individuals. Yet they might still attest to a fairly restricted practice in Hellenistic or early Parthian Babylon, perhaps limited to a single group or school, rather than a profound degree of Hellenisation which led the Babylonian priesthood to begin transmitting their authoritative texts on parchment in the Greek alphabet, and meant that their children regularly studied Akkadian in Greek transcription.

Where does all this leave us? Pending further palaeographical investigations or new data, the question of the Graeco-Babyloniaca tablets’ context and purpose must remain

¹⁵⁴ Kenyon 1899: 67–85. The tablet does contain one unusual feature – the rho which resembles a Greek digamma – but there are as yet no parallels for this elsewhere, although one of the hands in the first-century BC Avroman parchments comes quite close (Minns 1915: Table I Hand i).

somewhat open, leaving uncertain the level of engagement with Greek language and culture among the Hellenistic Babylonian elite. Similar uncertainties about Berossus' life and work also make it difficult to extrapolate from his case to the broader intellectual history of Seleucid Babylonia. As a result, like the astrological and astronomical material, Berossus and the Graeco-Babyloniaca are both core and peripheral to our project. On the one hand, they are further testimonia to deep and sustained contact between different intellectual traditions in the Hellenistic world. Even in the fragmentary form in which it survives, Berossus' *Babyloniaca* attests eloquently to the high level of linguistic and cultural bilingualism possible among the Babylonian elite of the early Hellenistic period. As educational texts, the Graeco-Babyloniaca offer one possible pathway by which such bilingualism, and ultimately the cross-cultural transmission of complex concepts between Babylonian and Greek scholarship, were achieved. On the other, the uncertainties surrounding their precise purposes mean that both the *Babyloniaca* and Graeco-Babyloniaca are of limited utility for reconstructing the broader intellectual or cultural worlds in which their writers moved.

Yet those worlds, and their points of intersection and divergence, are crucial for a history that traces distinctive features of Hellenistic intellectual life beyond their culturally specific manifestations. We must, then, attempt to explore those worlds by some other means, and that is what the remainder of this book sets out to do. We will meet Berossus again in [Chapter 6](#), where the intellectual geography of the *Babyloniaca* will constitute an important counterweight to the impression of disconnect between Greek and Babylonian geographical traditions. But for now we move beyond the exceptional individual and corpus, to study a range of contexts which may have sparked or facilitated contact between Greek and Babylonian scholarship. By exploring the limits of the possible in terms of contact and transmission, we may gain further insight into why students in Hellenistic Babylon learnt

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to transcribe Akkadian and Sumerian into the Greek alphabet, how a priest of Marduk came to write a Greek work on ‘things Babylonian’, and what they were all aiming to achieve. We will also discover new ways of connecting Hellenistic Greek and cuneiform scholarship.

ALEXANDRIA: THE MISSING LINK?

After the first Ptolemy, the second to reign over Alexandria, the one called Philadelphus, as already stated, was a lover of beauty and learning. He established a library in that same city of Alexander, in the part called the Brucheion (a quarter of the city which today is deserted), and put in charge of it a certain Demetrius, from Phaleron. Ptolemy ordered Demetrius to collect together books from the entire world, and wrote letters entreating each king and ruler on earth to take the trouble to send those books that were in his kingdom or domain – I mean books of poets, logographers, orators, sophists, doctors, iatrosophists, historians and the rest.¹

For the incontrovertible evidence they provide of cross-cultural exchange between Babylonia and the Greek-speaking world, the Graeco-Babyloniaca tablets, Berossus' *Babyloniaca* and the borrowings from Mesopotamian to Greek astronomy and astrology are key to the history of Greek and Mesopotamian cultural interaction, and to any cross-cultural history of intellectual life in the Hellenistic world. But many questions remain unanswered about the nature of those cross-cultural exchanges. Where did Berossus become familiar with Greek philosophical concepts, and how did his work come to be known in the Greek-speaking world? Were the Graeco-Babyloniaca the product of a single school or part of a widespread educational system in Babylonia? Exactly when and how did Babylonian mathematical astronomy and horoscopic astrology reach the Greeks? The points of contact we have examined, important though they are, tell us little about the contexts in which they occurred.

In order to pursue narratives of cross-cultural contact and influence, we must attempt to flesh out these contexts, to identify key centres or institutions for cross-cultural exchange. Berossus, Hipparchus and the Babylonian astronomers named by Strabo

¹ Epiph. *De mens.* 256–66.

are possible nodes on the individual level, but what of the broader picture? Which centres might have had sufficient resources and reasons to function as conduits between the scholarship of Mesopotamia and the Greek world? One contender is the intellectual institution which has almost since its inception epitomised the collection and transfer of knowledge: the Library of Alexandria. Since antiquity, the Library has been associated with universalism and conceptualised as an interface between east and west. According to a tradition exemplified by the excerpt from Epiphanius above, the Library of Alexandria was a repository of texts from all over the world, fed by the Ptolemies' desire to acquire a universal book collection. Some ancient writers specifically mention works from Mesopotamia among those which the kings aimed to collect; Epiphanius himself goes on to list the books of the 'Babylonians, Assyrians and Chaldaeans' among the acquisitions under Philadelphus.²

Two of the cases of direct cross-cultural contact we have already examined also lead in the direction of Alexandria. Although there is little evidence to suggest that the Museum or Ptolemaic court were key contexts for the transmission of Babylonian celestial scholarship, Hipparchus, who *was* a pivotal figure in the transmission of Babylonian astronomical methods, can be linked to Alexandria through his use of contemporary eclipse observations from the city. Meanwhile, the possibility that Berossus' *Babyloniaca* found its way to the Library is raised by a late antique glossary from Oxyrhynchus which quotes the *Babyloniaca* and is thought by its editor to preserve a Hellenistic 'core' compiled in Alexandria.³ The hypothesis thus arises that the Library of Alexandria – and potentially also the other Hellenistic royal libraries – were catalysts for the acquisition of Mesopotamian scholarship and channels for its westwards transmission. The Library of Alexandria and its analogues have also been linked to Mesopotamia in a genealogical sense, through the theory that Alexandria was partly inspired by the cuneiform libraries of Mesopotamia.

² Epiph. *De mens.* 272. ³ Schironi 2009; see pages 160–2.

The current chapter puts both hypotheses to the test. Entering the long-standing debate on the cultural politics of Hellenistic royal text collecting, it questions whether the Ptolemies or their competitors were interested in acquiring works from other cultures and argues that the Library, and the Museum with which it was associated, constituted a primarily or exclusively Greek enterprise.⁴ A critical re-evaluation of the sources used to link specific foreign works to the Library yields further evidence against the idea that Hellenistic royal libraries were important sites of contact between Greek and Babylonian intellectuals and/or their ideas. Finally, a comparison between Greek and Mesopotamian libraries reveals significant differences in form and function which tell against the idea that the Hellenistic royal libraries were inspired by their Near Eastern counterparts.

4.1 The Limits of Alexandrian Universalism

We begin with the idea of the universal library at Alexandria, and the global acquisitiveness of its royal masters as a link between cultures. According to a tradition which runs from the Hellenistic period to the present, the Ptolemies' aspiration to create a universal book collection led to the acquisition and/or translation of foreign literature for the Library of Alexandria.⁵ In the ancient sources this process is usually portrayed as benign, the result of

⁴ Any discussion of the Library of Alexandria must take a position on the question of its relationship with the Museum. Certainty is impossible, but following Fraser (1972 I: 324–5) I find it most likely that the Library was part of the Museum; I distinguish between the Library as the book collection, and the Museum as the intellectual institution which housed it, without any implication that they were physically separate. I omit here discussion of the 'daughter library' at the Serapeum, first mentioned by late Roman and Christian writers (on which see Pfeiffer 1968: 101–2; Fraser 1972 I: 323–4; Bagnall 2002: 352, 358). Excavations at the Serapeum found rooms which could have been used to store books, and the Serapeum was originally built by Ptolemy III, as attested by foundation plaques discovered *in situ* (Wace 1945: 106–7), but there is no clear evidence that a Hellenistic library existed there.

⁵ Among modern works, see e.g. Canfora 1990; El-Abbadi 1990: 98–9; Delia 1992: 1456–7; MacLeod 2000: 2–3, 7–8; Casson 2001: 35; El-Abbadi 2004: 170–1; Staikos 2004: 160–4 (taking the idea back to Alexander). Blum (1991: 102–3) is certain that the Ptolemies aimed at completeness for Greek literature and that works by 'barbarians' written or translated into Greek were also acquired; Fraser and Barnes share the certainty about Greek literature but are more cautious about foreign works (Fraser 1972 I: 329–30; Barnes 2000: 67, 76).

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genuine respect for the knowledge of Near Eastern cultures and/or a real drive to possess all the world's books; the Jewish and Christian sources in particular tend towards this view, stressing the Ptolemies' love of learning.⁶ Alternatively, and frequently in modern historical works, it is interpreted more cynically as cultural imperialism, reflecting the Ptolemies' desire to assert Greek supremacy over other cultures, or simply to outdo their royal rivals in the breadth of their collection.⁷ But whatever motives are attributed to the royal founder(s) of the Library, how strong is the evidence that they were aiming to collect everything in the first place?

The idea of a universal library at Alexandria first appears in a Greek literary text known as the *Letter of Aristeas*, which is also the earliest surviving source to mention the Library of Alexandria (as distinct from the Museum). Probably written in the second century BC, this text purports to be a letter from one Aristeas, a courtier of Ptolemy II, to his brother, and offers an account of the translation of the Hebrew Bible into Greek as the Septuagint. In a conversation supposedly overheard by 'Aristeas', Demetrius of Phaleron, who has been tasked by Philadelphus with gathering books for the Library, advises the king that the laws of the Jews are worth including. There follows an elaborate narrative describing Ptolemy's request for Jewish scholars from Jerusalem to produce an authoritative translation; Aristeas' journey to and from the holy city; the arrival of the seventy-two Jewish translators in Alexandria; a long sympotic inquisition at which the king tests and is impressed by their intellectual competence; and finally the completion of the translation.⁸ The claim of universal collection

⁶ E.g. *Ar.* 9 (Ptolemy II desires to collect all the books in the world); Jos. *AJ* 1.10 (Philadelphus is 'zealous concerning *paideia* and the collection of books' (περὶ παιδείαν καὶ βιβλίων συναγωγὴν σπουδάσας), and 'particularly eager' (ἐξαιρέτως ἐφιλοτιμήθη) to obtain a translation of the Jewish law and 'constitution' (διτάξιν τῆς πολιτείας); Philo *Mos.* 2.31 (Ptolemy II is inspired by his 'great love and admiration for the law of Moses' to conceive the idea of a translation); Iren. *Adv. haer.* 3.31/Euseb. *Hist. eccl.* 5.8.11 (Ptolemy I is eager to 'adorn' (κοσμήσαι) his library with the writings of all men which are 'worthy of attention' (σπουδαῖα)); Clem. Al. *Strom.* 1.22.148 (Ptolemy I or II is eager to adorn the library with all writings); Pseudo-Justin *Cohortatio* 13d (Philadelphus finds out about the 'ancient histories' (ἀρχαίας ιστορίας) of the Hebrews and wishes to learn what is written in them).

⁷ Greek supremacy: Erskine 1995: 42–3; Too 2010: 35–6. Competition: MacLeod 2000: 3.

⁸ On the dating of *Aristeas*, see Hadas 1951: 3–54; Honigman 2003: 128–30, 136–9.

appears as explanatory background when Demetrius proposes to the king that the Hebrew scriptures should be added to the Library:

When Demetrius of Phaleron was appointed as overseer of the king's library, he was supplied with vast sums of money with the purpose of collecting together, if possible, all the books throughout the inhabited world, and by making purchases and copies he carried out the king's design to the best of his ability. Once when I was present Demetrius was asked, 'How many thousands of books are there?' He replied, 'More than two hundred thousand, your majesty, and I will do my best to acquire the remainder in the near future, to make up the total to five hundred thousand. And I have been informed that the Jews also have laws which are worthy of being transcribed and of a place in your library.'⁹

Later Jewish and Christian authors transmitted the general universalist claim and the Septuagint narrative, down to Tzetzes in the twelfth century AD, who despite his shortcomings as a source has been used by many historians due to his relatively full account of the Library.¹⁰ In the late antique sources the theme of universalism is elaborated: Epiphanius, as we have seen, has Ptolemy writing to all rulers on earth to request books, while Syncellus highlights the books of the Greeks, Chaldaeans, Egyptians and Romans, stating that those written in foreign languages were translated into Greek.¹¹ But all these sources are later than, and probably dependent on, *Aristeas*. The ancient evidence that the Ptolemies and their Library aimed at universalism therefore comes down to this single source.¹²

The appearance of the universality trope in *Aristeas* certainly tells us something about the hold the Library, and the royal resources behind it, were capable of exerting on the imagination just a century after its foundation. Taken as the prime witness to the historical reality of early Ptolemaic book-collecting, however, *Aristeas* represents a troubling prospect. As a long line of scholars from the sixteenth century to the present day have observed, the

⁹ *Ar.* 9–10.

¹⁰ Joseph. *AJ* 1.10–12; Philo *Mos.* 2.29–44; Justin, *Apol.* 31.2.2–5; Iren. *Adv. haer.* 3.31; Clem. Al. *Strom.* 1.22.148; Pseudo-Justin *Cohortatio* 13d; Euseb. *Hist. eccl.* 5.8.11; Epiph. *De mens.* 256–329; *Dialogus Timothei et Aquilae* 39.8; Sync. 327; Tzet. *Proleg.* Proemium II.1–21. For varying appraisals of Tzetzes as a source on the Library, see Blum 1991: 104–13; Bagnall 2002: 349.

¹¹ See [previous note](#). ¹² Murray 1967: 338.

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Letter is extremely problematic as a historical source.¹³ The work was probably composed more than a century after the time it purports to describe, and it contains various anachronisms and otherwise ahistorical elements, including Demetrius' close relationship with Ptolemy Philadelphus (who in fact dismissed the philosopher from court upon his accession because he had advised his father not to make the future Philadelphus his successor); the existence of the Biblical twelve tribes of Israel in Hellenistic Judaea (legendary long before the third century) and a Jewish politeuma in Alexandria (not created until the second century); the chronologically impossible presence of certain guests at the symposium, and probably also Aristeas himself, for whose existence there is no independent evidence.¹⁴

In addition to these lapses in historicity, *Aristeas'* status as a 'charter myth' or apologia for the Septuagint, or for Alexandrian Judaism more generally, casts a shadow over its ostensibly more plausible elements.¹⁵ Although its precise aims and intended audience(s) remain contested, it is clear that this text is designed to lend authority and prestige to the Greek translation of the Torah, and/or more broadly to Judaism as practised in the Hellenistic diaspora.¹⁶ This strong programmatic orientation invites caution about taking any element of the text at face value, but the claim that Demetrius was instructed to collect all the books of the inhabited world is particularly suspect, since it supplies the context and motivation for the entire narrative. As Roger Bagnall

¹³ For a summary see Rajak 2009: 38–40.

¹⁴ Ptolemy and Demetrius: *Ar.* 9–11, 28–32, 312–17 (cf. Demetrius' advice to Soter: Diog. Laert. 5.78–9); twelve tribes: *Ar.* 32, 39 (six elders from each tribe to be selected), 47–50 (names of the seventy-two elders, explicit reference to the twelve tribes), 97 (Eleazar's breastplate contains twelve stones inscribed with the names of the original leaders of the tribes); politeuma: *Ar.* 310. On these and other ahistorical elements within the text, see Hadas 1951: 5–9; Murray 1967: 338–43; Fraser 1972 I: 700–3; Orlinsky 1975; Honigman 2003: 69–74, 85–91, 98–101; Bagnall 2002: 349–50; Rajak 2009: 64–6; Hunter 2011: 48–9. Collins 2000 defends its historicity.

¹⁵ Tcherikover 1958: 73–7; Murray 1967; Honigman 2003 esp. chs. 2–3; Rajak 2009: ch. 1.

¹⁶ *Aristeas'* objectives and target audience continue to be the subject of intense debate; for a survey of the main contributions see Rajak 2009: 38–43 (Gruen 1998: 206–22 should be singled out for the original thesis that the work's main aim is to promote links between diaspora Judaism and the centre and that it adopts an attitude of superiority towards Greek culture). The relatively small space given to the translation within *Ar.* certainly suggests that a focus on the LXX alone is too restrictive. On the Ptolemaic connection, see also pages 157–9.

puts it, *Aristeas* ‘has that least attractive quality in a source: to be trusted only where corroborated by better evidence, and there unneeded’.¹⁷

In the case of the Ptolemies’ culturally all-embracing desire for books, there is no better evidence to corroborate *Aristeas*: the rhetoric of universality is absent from the Classical sources. Huge figures for the number of book rolls in the Library appear here too, but the motif of universal acquisition is missing altogether. Seneca criticises Livy for mourning the loss of 40,000 volumes to fire during Caesar’s Alexandrian War, but says nothing about the size or scope of the overall collection.¹⁸ Aulus Gellius records that a total of 700,000 books were collected by the Ptolemies and subsequently burnt by Caesar, but simply states that this ‘huge number’ was ‘collected together or made’ (*conquisitus vel confectus*) with no mention of foreign acquisitions or global coverage.¹⁹ Similarly, Ammianus Marcellinus states only that the 700,000 volumes which were burnt had been ‘brought together through vigorous efforts’ by the Ptolemaic kings (*vigiliis intentis composita*).²⁰ It is clear that these authors considered the Alexandrian collection to be extremely large, but there is no implication that the aim was to collect everything, or that the scope extended to foreign works.

Apart from *Aristeas*, the other source often pressed into service to support the universal collection narrative is the story recorded by Galen in his *Commentary to Hippocrates’ Epidemics* that Ptolemy III was so ‘eager for books’ (φιλότιμον δὲ περὶ βιβλία) that he ordered the books from all the ships which docked at Alexandria to be confiscated and copied; the originals were then placed in the Library with the inscription ‘from the ships’ added, while the copies were returned to the books’ owners.²¹ Even if this anecdote could be relied upon, which is far from certain, it presents Ptolemaic collecting as more opportunistic than universalist, and leaves considerable room for selectivity. First, it is not clear whether ‘all the ships’ really means *all* ships from everywhere, or whether an unwritten restriction to Greek vessels is understood to

¹⁷ Bagnall 2002: 352. ¹⁸ Sen. *Tranq.* 9.5. ¹⁹ Gell. *NA* 7.17.3.

²⁰ Amm. Marc. 22.16.13; on the figures for the Library’s size, see Bagnall 2002: 351–6.

²¹ Gal. *Hipp. Epid.* 3.606.

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be too obvious to be explicitly articulated. Second, the procedure by which the books ‘from the ships’ reached the Library is not fully elucidated. Did everything that was seized end up in the Library, or was there an interim process of selection? The stress on the books being brought to Ptolemy himself (stated twice in the anecdote) could preserve an echo of a selection process in which the king viewed and approved or rejected new titles, while Galen’s statement that the confiscated copies were not immediately placed in the Library but piled in storehouses might also imply that some works were culled between the ships and the shelves.²²

The question of selectivity brings us to an important point. As James O’Donnell observes, ‘what we mean by a comprehensive collection of books . . . is exactly dependent on who we are,’²³ and it seems clear from the Classical sources on the Library that ‘universality’ as we understand it today was not the aim. The picture given by Greek and Roman authors is one of wide-ranging but targeted acquisition. According to Athenaeus, purchases were made on the open book market, but there is no sense that the Ptolemies or their later Pergamene competitors were collecting indiscriminately.²⁴ Rather, the surviving narratives stress Ptolemaic and Attalid efforts to obtain rare, old and prestigious texts. After the anecdote about the ‘books from the ships’, Galen relates the story of how Ptolemy III Euergetes tricked the Athenians out of the original manuscripts of Aeschylus, Sophocles and Euripides by sending them back the copies and simply forfeiting his fifteen-talent deposit; this, Galen comments, shows Euergetes’ ‘fondness for old books’.²⁵ Meanwhile, Strabo and Athenaeus’ competing narratives about the afterlife of Aristotle’s library offer little certainty over the fate of his books, but add to the impression of discerning royal bibliophiles. Whether Aristotle’s books were sold to Ptolemy II (Athenaeus), or buried in Scepsis to avoid seizure by the Attalids, later sold to Apellicon of Teos and eventually carried off to Rome by Sulla (Strabo and Plutarch), the bulk of the Peripatetic corpus – and with it a large part of the Greek

²² Gal. *Hipp. Epid.* 3.607. ²³ O’Donnell 1998: 40. ²⁴ Ath. 1.3b.

²⁵ Gal. *Hipp. Epid.* 3.607. Galen also stresses the Hellenistic kings’ interest in *old* books at *HNH*. 1.44.105. We may also note that even with the potentially indiscriminate gathering of books from the ships it is the originals which are retained.

philosophical heritage – enters the royal collectors’ ambit either way.²⁶

Many of the details of these colourful narratives are open to question, but they include our earliest surviving sources about the Library and present a consistent picture: the Hellenistic kings collected texts on a huge scale but by no means indiscriminately, seeking old works and those core to the Greek cultural heritage, and valuing originals over copies. We do not hear of the Ptolemies systematically scouring the world for books except in the *Letter of Aristeas* and its later dependants which, as we have seen, require this as explanatory background for their account of the Septuagint translation. In fact, as Richard Hunter observes, even in *Aristeas* the theme of universalism is in tension with that of selectivity: Demetrius is presented as concerned with books which ‘deserve’ a place in the Library, implicitly acknowledging that the aim is to collect only those worthy of inclusion.²⁷

The picture given by the Classical sources of the selective targeting of prestigious items also fits the wider context of Hellenistic royal collecting, another important framework for understanding the royal libraries. The kings’ efforts to acquire books were not just an act of cultural appropriation, but part of the competitive collection of resources in which Hellenistic rulers were perpetually engaged; books and scholars could be as much a currency of power as taxes and territories.²⁸ The language used in our sources of ‘gathering together’ (*synagein*) both texts and learned experts assimilates them to the other exotica amassed by rulers and displayed to advertise their supremacy; it can be no coincidence that Athenaeus mentions the *synagoge* of the Museum just after describing Philadelphus’ grand procession which was a gigantic demonstration of the Ptolemies’ acquisitive power.²⁹ As with other commodities, however, a truly universal collection of books could risk losing its value by dilution. Just as

²⁶ Ath. 1.3a–b; Strabo 13.1.54 (Strabo states that the Lyceum retained a few exoteric works); Plut. *Sull.* 26.2. The variety of traditions about the fate of Aristotle’s library (Too 2010: 24–30) makes it difficult to draw any conclusions. Gottschalk (1972: 335–42) contends that all the ancient narratives are false and the books remained in Athens; Blum (1991: 52–61) argues that Athenaeus’ account is to be trusted.

²⁷ Hunter 2011: 50–1. ²⁸ Cf. Kuttner 2005: 144; Strootman 2007: 213–14.

²⁹ Ath. 5.203e.

4.2 Foreigners in the Library?

Philadelphus' procession dramatised the Ptolemies' ability to gather the choicest gems, spices and animals from all over the world,³⁰ so the Library of Alexandria showcased their power to collect the rarest and most valuable texts. The idea of the universal library thus disappears into the mirage surrounding Alexandria, and with it one means of connecting Mesopotamian intellectual culture with the royal libraries of the Hellenistic world.

4.2 Foreigners in the Library?

Even if the Ptolemies and their competitors were not aiming to collect all the books of the world, this does not preclude them having an interest in *some* foreign works. Any evidence for the acquisition or translation of works by non-Greek authors would make the Library a potential point of contact with Mesopotamian scholarship. Like the image of universality, however, allusions or direct references to systematic translation activity at the Library come from *Aristeas*, or the later Jewish and Christian sources which are probably dependent on it.³¹ This leaves several specific cases of non-Greek writings or works in Greek by non-Greek authors which have been connected with the Library: the Pentateuch; Buddhist and Zoroastrian texts; and the works of Manetho and Berossus. These are the building blocks upon which rests the image of the Alexandrian Library as collector of alien wisdom. Yet once they are examined more closely, the edifice, like other aspects of the scholarly *imaginaire* explored by Bagnall, begins to crumble.³²

The evidence for the presence of Buddhist and Zoroastrian writings is equivocal to say the least, although the former is

³⁰ Thompson 2000.

³¹ The idea of a translation programme is implicit in Aristeas' narrative that Demetrius was tasked with collecting all the world's books and in the fact that the acquisition of the Jewish scriptures is presented as difficult not simply because they are in another language but because the Jews in Judaea speak a peculiar language other than Syriac (*Ar.* 9–11; one might also understand μεταγραφάς in 9 to include translations as well as transcriptions). Later sources are more explicit: Syncellus (15–21, 327) claims that Philadelphus collected all Greek, Chaldaean, Egyptian and Roman books and had all the non-Greek ones translated; Tzetzes (*Proleg.* Prooemium II.17–21) that Philadelphus collected books from all over and had them translated by native speakers.

³² Bagnall 2002.

more compelling than the latter. The case for Buddhist works seems to be based on an extrapolation from the edicts of the Mauryan ruler Aśoka (r. ca. 265–238 BC) and the contacts known to have existed between the Mauryan empire and the Macedonian kingdoms.³³ Aśoka's edicts survive in more than 150 inscriptions on rock faces and pillars at some thirty sacred sites across northern India and Afghanistan.³⁴ They proclaim the king's commitment to *dhamma* – a set of ethical and moral precepts centred on non-violence and tolerance towards living things which owes much to Buddhist thought – and recount his efforts to promote it in his own kingdom and (through embassies) among his neighbours, including the Macedonian kingdoms to the west.³⁵ Thus, in Major Rock Edict 13 the

³³ Buddhist works in the Library: Barnes 2000: 67; El-Abbadi 1990: 99; El-Abbadi 2004: 170. On Aśoka and his reign the most recent edition of Thapar's *Aśoka and the Decline of the Mauryas* (Thapar 2012) offers the most accessible overarching account; see also Barua 1969 for a more in-depth treatment. Falk 2006: 13–54 offers a comprehensive survey of all sites, inscriptions and artefacts associated with Aśoka and collects much of the more specialist bibliography up to 2006. On the relationship between the Mauryan empire and the Hellenistic world, see in general Karttunen 1997; von Hinüber 2010 (possible influence from Hellenistic royal letters on Aśoka's edicts); Thapar 2012: 157–72 (less detailed than other works, but usefully sets the Macedonian case within the context of relations with other powers); Fauconnier 2015 (arguing that the importance of both Chandragupta and Alexander in narratives of the emergence of the Mauryan empire is an artefact of modern colonialism). For a variety of perspectives on Mauryan–Seleucid relations see Scharfe 1971 (suggesting that the Mauryas may have been subordinate); Kuhrt and Sherwin-White 1993: 91–103 (two independent empires; Seleucid 'failure' to retake Indian territories a recognition of Mauryan strength); Salles 1994 (peaceful and sustained political, economic and diplomatic relations, with the Persian Gulf as a key contact zone); Wiesehöfer 1998; Kosmin 2014b: 31–58 (establishment of a closed imperial boundary between two sovereign states through diplomacy and spatial ideology).

³⁴ On the locations of the different edict types and the reasons behind them, see Falk 2006: 55–6 (Minor Rock Edicts), 111–12 (Major Rock Edicts), 147 (Pillar Edicts). The most comprehensive edition and translation of the edicts is still Hultzsch 1925; Allchin and Norman 1985 list all inscriptions known at that date with bibliography, of which the most important is Sircar 1979 with editions of most of the inscriptions discovered after Hultzsch. Andersen 1990 offers updated editions of the Minor Rock Edicts in the light of new discoveries (see also the review by Norman 1991); Falk 2006 is the most up to date and overarching collection of sources and bibliography, with new readings of some of texts based on collation by the author. Thapar 2012: Appendix V offers idiomatic English translations.

³⁵ For varying views of Aśoka's conception of *dhamma* and his relationship to Buddhist *dharma* and early Buddhism more broadly, see discussion and bibliography in Thapar 1960; Barua 1969 ch. 7; Thapar 2012 ch. 5.

king renounces violence; declaring that he considers the principal form of conquest to be that by *dhamma*, he boasts:

This (conquest by *dhamma*) has been won repeatedly by the Beloved of the Gods (i.e. Aśoka) both here and among all (his) borderers, even to a distance of six hundred *yōjanas*, where the Yōna king named Antiyoga (rules) and beyond this Antiyoga, (where) four kings named Tulamaya, Antekina, Makā and Alikyashudala (rule), (and) likewise towards the south, (where) the Chōḍas and Pāṇḍyas (are ruling), as far as Tāmraparṇi.³⁶

The combination of kings mentioned here can only be Antiochus II (r. 261–246), Ptolemy II (r. 283–246), Antigonos Gonatas (r. 276–239), Magas of Cyrene (r. 276–250) and Alexander II of Epirus (r. 272–242). This not only offers a chronological anchor for Aśoka's reign, but reveals Aśoka's detailed knowledge of the geopolitical situation in the contemporary Hellenistic world and his determination to engage with its rulers and populations. While the majority of the surviving edicts are in Prakrit, the existence of Aramaic, Greek and Aramaic-Greek bilingual versions from Kandahar confirms Aśoka's intent and ability to reach across cultural and linguistic borders.³⁷ Indeed, the Greek of these inscriptions attests to a high level of linguistic and cultural translation: they are written in lapidary script characteristic of their time across the Hellenistic world and in a fluent style with concessions to Greek cultural norms, even if the occasional omission of material which appears in the Prakrit versions might suggest that the scribes struggled to translate more complex or culturally specific terms.³⁸

³⁶ Major Rock Edict 13 (translation adapted from Hultzsich 1925: 48). From the following section about the places where the envoys of Aśoka do not go, it is implicit that they *do* go to the list of places mentioned here. 'Antiochus the Greek king and the kings neighbouring him' are also mentioned in Major Rock Edict 2, where Aśoka claims to have provided medical care for humans and animals in the form of medicinal plants and the installation of wells along the roads in his own kingdom and those of his neighbours (Hultzsich 1925: 2–4 ; cf. Thapar 2012: 377).

³⁷ See Falk 2006: 241–53 for sites and collected bibliography on each inscription, to which should be added Kuhrt and Sherwin-White 1993: 101–2. The preserved part of the monolingual Greek inscription from Kandahar parallels the end of Rock Edict 12 and the first part of 13 (edition and translation by Fussman and Robert in Schlumberger 1964; see also Benveniste 1964; Schlumberger and Benveniste 1967; Norman 1972). The Greek-Aramaic bilingual is edited in Schlumberger *et al.* 1958; Pugliese Carratelli and Garbini 1964.

³⁸ On the 'panhellenic' character of the Greek script and the presentation of concepts 'à la grecque' see Robert's article in Schlumberger *et al.* 1958: 11–18 (Greek-Aramaic bilingual) and his comments in Schlumberger 1964: 135–40 (monolingual); see also

Aśoka's edicts offer crucial evidence for links between the Mauryan and Hellenistic kingdoms and the king's determination to spread knowledge of *dhamma* to the west, while the existence of Greek and bilingual versions demonstrates his capacity to communicate with Greek-speaking audiences within and beyond his territory. Yet several leaps of faith are required to get from Aśoka's edicts to Buddhist texts in the Library of Alexandria. The surviving Greek inscriptions are from Afghanistan, and if Aśoka did send embassies to the Ptolemies or other Hellenistic kingdoms to promulgate *dhamma* they have left no trace in the Greek sources. It is also unclear whether Aśoka sought to communicate knowledge of Buddhism, rather than his own moral and social system of *dhamma*; any embassies that did reach the Hellenistic courts may not have been vectors for Buddhist teachings in the broader sense.³⁹ Nor did they necessarily involve texts which might subsequently have circulated in the west: the edicts do not mention the carrying of books or other writings. Finally, it is important to remember that the edicts are ideologically laden compositions designed to augment the authority of *dhamma* and that of Aśoka himself. Although we know from the Graeco-Roman sources that the Seleucids and Mauryas maintained diplomatic relations, the claims about the kings 'beyond Antiyyoga' may well be exaggerated.⁴⁰ Given the contacts between the Mauryan and Hellenistic courts and Aśoka's zeal to communicate his moral vision to his Macedonian 'neighbours', it would be rash to rule out altogether the possibility that copies or translations of texts containing Buddhist teachings reached Alexandria and even entered the Library. Yet there is so far no positive evidence that this was the case.

The case for Zoroaster's writings is significantly weaker and can be quickly dismissed. It rests on a passing reference in Pliny to

Benveniste 1964 on the style and translation technique of the monolingual Greek inscription. On omissions as a sign of translation difficulty in the Greek monolingual, see Norman 1972.

³⁹ See n.35.

⁴⁰ Seleucus I and Chandragupta: Strabo 15.2.9; App. Syr. 55; Justin 15.4.21. Deimachus and Megasthenes sent as Seleucid ambassadors to the Mauryan court at Pataliputra: Strabo 2.1.9, 15.1.36. Antiochus I and Bindusara: Ath. 14.652f–653a (cf. pages 206–7). Antiochus III and Sophagesenus: Polyb. 11.34.

the work of Hermippos of Smyrna, a scholar of the third century BC who ‘wrote most carefully about the whole of that art (i.e. Zoroastrianism)’.⁴¹ The fact that Hermippos is called ‘the Callimachean’ by Athenaeus does suggest an association with the scholarly community at Alexandria, but Pliny’s statement mentions neither the city nor the Library.⁴² It therefore cannot be taken as evidence that Hermippos studied Zoroastrian writings in Alexandria, that his eastern interests were shared by the institution, or that he obtained any Persian sources he did consult from the Library rather than from the open book market. Without further evidence, then, there is nothing to place Zoroastrian writings in the Library.

For the Hebrew Bible we return to the ever-problematic *Letter of Aristeas*. If this text cannot be trusted on its claims about universality, what of the specific case of the translation of the Pentateuch? *Aristeas* is not quite the only surviving witness here. Aristoboulos, an Alexandrian Jew who lived in the reign of Ptolemy VI Philometor (r. 180–145 BC) and whose work survives as five fragments in Eusebius, also linked the translation with Ptolemy II, while Clement of Alexandria (ca. AD 150–215) states that some writers attributed it to Ptolemy I.⁴³ Unfortunately, nothing more of this alternative tradition or Aristoboulos’ account survives, nor is it certain that Aristoboulos is independent of *Aristeas*.⁴⁴ Once again, therefore, we are effectively reduced to the latter source.

It seems probable that the Septuagint originated in early Hellenistic Alexandria, but the fact that our earliest evidence for a Ptolemaic connection is *Aristeas* casts doubt on the role played

⁴¹ Plin. *HN* 30.4; Fraser 1972 I: 330; Barnes 2000: 67; El-Abbadi 1990: 99; Canfora 2000: 53; Le Boulluec 2000: 57 (who assumes that the Zoroastrian works were pseudoepigraphic); El-Abbadi 2004: 170.

⁴² Hermippos ‘the Callimachean’: *FGrHist* 1026 T2a–c, T10c; on Hermippos’ life and work see further Bollansée 1999: 1–20.

⁴³ Aristoboulos Fr. 2, 23–29 (=Euseb. *Praep. evang.* 13.12.2); Clem. Al. *Strom.* 1.22.148. The five surviving fragments of Aristoboulos are edited in Denis 1970: 217–28 and translated with introduction in Charlesworth 2010: 831–42.

⁴⁴ A growing consensus since the second half of the twentieth century has found insufficient evidence for a relationship of literary dependence in either direction; rather, the two drew on a common tradition: see e.g. Hadas 1951: 26–7; Honigman 2003: 90–1; Wright 2015: 28–30. Gmirkin 2006: 77–80 argues that Aristoboulos is the author of *Aristeas*.

by the ruling power.⁴⁵ Nonetheless, in the continuing debate over *Aristeas*' historicity, some recent studies have swung back towards acceptance of Ptolemaic involvement. Alain Le Boulluec views the translation as driven by Ptolemaic 'curiosity about foreign lawmaking and "alien wisdom", and the political desire to better control a sizeable community by respecting its customs'.⁴⁶ Sylvie Honigman also suggests that a translation of the Septuagint was made for the Library as a political move, in this case reflecting a claim to Judaea in the context of the Ptolemies' ongoing struggles with the Seleucids.⁴⁷ Tessa Rajak also aligns the translation with Ptolemaic interest in the Jews – both political, related to Ptolemaic control in Judaea, and intellectual, part of an Alexandrian interest in exotic places and peoples born from Alexander's 'inclusive legacy of enquiry' and shaped by Peripatetic concerns with foreign *nomoi*.⁴⁸ These reconstructions are appealing insofar as they tie the Septuagint translation neatly to Ptolemaic cultural imperialism within the Greek world, and also, in Rajak's case, to the legacy of Alexander which was so important to the early Ptolemies. Yet equally compelling reasons exist for rejecting the historicity of royal involvement. Oswyn Murray's contention that Philadelphus and the Library were included to lend prestige and authority because *Aristeas* was designed to recommend the Septuagint and Judaism to Greeks remains a plausible interpretation (although since Judaism was not a proselytising religion such a move is likely to have been more about promoting tolerance than conversion). Alternatively, Hunter's observation that *Aristeas* may 'serve as a reminder of how easy it was for writers to construct history in terms of royal policy' raises the

⁴⁵ On the origins of the Septuagint, see for a useful introductory summary of different approaches and questions Dines 2004: 41–62; a more in-depth survey of scholarship up to the end of the twentieth century can be found in Marcos 2000: 35–105 (esp. 35–66) with bibliography. Collins 2000 argues that the translation was completed in 281 BC, with a level of chronological specificity which does not seem supported by the evidence available, and relying heavily on *Aristeas*; Honigman 2003: 93–139 offers a critical assessment of existing theories before advancing a new hypothesis involving an original translation in the reign of Ptolemy II (on Jewish initiative but with royal patronage) and the creation of an authoritative version in the second century BC; Rajak 2009: ch. 1 also finds it plausible that the translation took place under the auspices of Ptolemy II.

⁴⁶ Le Boulluec 2000: 63. ⁴⁷ Honigman 2003: 116–18. ⁴⁸ Rajak 2009: 64–91.

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possibility that Ptolemy's inclusion in the story reflects broader historiographical tendencies rather than specific authorial aims.⁴⁹

Even if the involvement of both king and Library are historical, there is no guarantee that the case of the Septuagint reflects a broader pattern; quite the opposite, in fact. The relationship between the Alexandrian Jews and the Ptolemies, and the background of Ptolemaic activity in Judaea, means that the translation may have been an exceptional, politicised action which bore no relation to the typical policy of either the Ptolemies or the Library. Indeed, both Honigman and Rajak view the Septuagint as the exception rather than the norm, finding it unlikely that other translated works were included in the Library.⁵⁰ Whether or not *Aristeas'* translation narrative is accepted, therefore, there is no evidence for the collection or translation of non-Greek works being a significant feature of the Library's activity or prominent among the aims of its founders. We are ultimately reduced to an argument from silence, but Minna Skafte Jensen's point that a systematic translation programme should have left some traces in the Greek literary tradition is an important one.⁵¹ Stressing the near-total absence of Near Eastern topics from the Homeric scholia, and the evidence from book titles that the scholars of the Museum concentrated on Greek topics, Jensen makes a strong case against the idea that the Macedonian rulers and the scholars they sponsored were interested in anything other than Greek literature. Rather, the Ptolemies established 'a centre of Greek learning, for which Greek books were bought and Greek scholars invited to study them'.⁵²

This leaves only two possible counterexamples to this scenario of indifference: Manetho and Berossus. Given that both authors wrote in Greek and engaged with Greek intellectual traditions,⁵³ the inclusion of the *Aegyptiaca* or *Babyloniaca* would not contravene the essential Greekness of the Library's collection, but might suggest a more general interest in foreign authors and their works. Manetho himself can be plausibly linked to the Ptolemaic court.

⁴⁹ Murray 1967; Hunter 2011: 49. ⁵⁰ Honigman 2003: 115–17; Rajak 2009: 26–7.

⁵¹ Jensen 2009: 90. ⁵² Jensen 2009: 91.

⁵³ Berossus: See Chapter 3, 102–7; Manetho: Moyer 2011: 103–41; Dillery 2015, esp. chs. 2, 3, 4 and 6; Gruen 2017: 307–10.

The historicity of a story in Plutarch which makes him a royal advisor to Ptolemy I is debatable, but as Ian Moyer observes, Manetho's origins in Sebennytyos and the early Ptolemies' cultivation of links with the Sebennyte dynasty provide a credible context in which he could have attained such a high position.⁵⁴ A letter of complaint sent in 241 or 240 BC by the high-priest Petosiris which mentions a 'Manetho' may also refer to the author of the *Aegyptiaca*; the context suggests an important official, which yields another potential link to the court.⁵⁵ However, there is nothing to connect Manetho with the Library. He may or may not have dedicated his work to Ptolemy Philadelphus; the sole evidence for this is the *Book of Sothis*, a work about Egypt's history quoted by Syncellus which purports to be by Manetho but is generally thought to be pseudoepigraphic.⁵⁶ Even if he did, this is not enough to claim that the *Aegyptiaca* was royally commissioned for the Library. Like Berossus' *Babyloniaca*, the *Aegyptiaca* may be an unsolicited response to foreign conquest which aimed to explain and promote Egyptian culture and history to the country's new rulers in terms they would understand. Ultimately, there is nothing in the fragments of the *Aegyptiaca* or its transmission history to link Manetho to the Library, or suggest that the scholars of the Museum engaged with his work.

Until the middle of the twentieth century, the same was the case for Berossus, but the discovery and publication of the so-called Oxyrhynchus Glossary provided potential evidence of Alexandrian reception for the *Babyloniaca*.⁵⁷ The papyrus on which the Glossary is written has been dated to the second century AD, but since the majority of works cited in the text were written between the fourth and second centuries BC, Francesca Schironi argues that the core of the work is Hellenistic.⁵⁸ Given the specialised nature of the Glossary and the range of works cited, she suggests that it was originally

⁵⁴ Plut. *De Is. et Os.* 28; for discussion, see Moyer 2011: 86–7.

⁵⁵ *P.Hib I* 72; Moyer 2011: 86.

⁵⁶ *Book of Sothis* F1 (Sync. 73); on the authenticity of the *Book of Sothis* see Waddell 1940: xxvii–xxviii; Verbrugge and Wickersham 1996: 102 with bibliography.

⁵⁷ *P.Oxy.* 1802+4812; *editio princeps* and discussion: Schironi 2009.

⁵⁸ Schironi 2009: 13.

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compiled ‘in an important cultural center where . . . a large library was available’, probably Alexandria or Pergamon.⁵⁹ Schironi favours Alexandria, for a number of reasons: the Alexandrians’ supposed interest in foreign works, ‘as demonstrated for example by the historical works of Manetho or by the translation of the Hebrew Bible’⁶⁰; the Egyptian provenance of the surviving copy of the Glossary; a long quotation from Apollodorus of Athens, whom Schironi links with Alexandria; the Glossary’s use of the incipit to refer to Aristotle’s *Historia Animalium*; and similarities between the Glossary and the lexicon of the glossographer Hesychios (ca. sixth century AD), which reflects (via multiple epitomes) the lexicon of Pamphilos, who worked in Alexandria in the first century AD.⁶¹

It seems likely that the Glossary intersected with Alexandrian scholarship at some point during its history. We have seen that there is minimal evidence for Alexandrian interest in foreign works, including the *Aegyptiaca* and Septuagint, but the link to the tradition of Pamphilos is compelling; his lexicon seems to have shown the same interest in *realia* and dialectal rather than literary words.⁶² So, too, the Oxyrhynchus copy is strong evidence that the Glossary or a forerunner passed through Alexandria, even if it did not originate there; it is unlikely that a work found in the Egyptian *chora* would not have circulated in the capital. Yet this is insufficient to place Berossus’ *Babyloniaca* in Hellenistic Alexandria, or link it to the Library. The compiler of the Glossary or its precursor(s) may have taken the quotations of Berossus from intermediate sources; even if they did consult the *Babyloniaca* directly, this would only prove that that it was available in Alexandria by the first or second century AD. The other evidence adduced for the Alexandrian hypothesis is weaker. Schironi makes a persuasive case that the use of the incipit to refer to the *Historia Animalium* might reflect Alexandrian practice, but since we know

⁵⁹ Schironi 2009: 13. Schironi dismisses Athens on the grounds that ‘in the Hellenistic period it was less of a cultural center than Alexandria and Pergamon, and its library was not as rich as those of these other two cities’ (13, n.2). Athens was still pre-eminent in philosophy, and we know very little about book collections there, but since Hellenistic glossography is associated more with the two royal centres, an Athenian origin does seem less likely.

⁶⁰ Schironi 2009: 16. ⁶¹ Schironi 2009: 15–19, 43–52. ⁶² Schironi 2009: 50–1.

comparatively little about how this work was referred to in other centres this cannot be a decisive indicator.⁶³ Similarly equivocal as evidence for provenance is the quotation of Apollodorus of Athens; although the biographical testimonium about him being a pupil of Aristarchus of Samothrace ‘for a long time’ suggests an extended period in Alexandria, the dedication of his *Chronica* to Attalus II links him just as strongly to Pergamon.⁶⁴

It is worth dwelling briefly on the possibility of a Pergamene connection for the Glossary and, potentially, Berossus. Schironi’s main reason for linking the Glossary to Pergamon is its content: the scholars of Pergamon seem to have been more interested in antiquarian and ethnographic topics than those of Alexandria, and the preserved lemmata of the Glossary suggest a particular interest in dialectal and foreign words.⁶⁵ Of course, if the Glossary was compiled in Hellenistic Pergamon, this need not mean that the compiler drew on Berossus directly and hence that the *Babyloniaca* was available there. But there are also other factors that suggest Hellenistic Pergamon as a centre for the reception of Berossus’ work.

One is a connection between Berossus and the Stoics. As we saw in [Chapter 3](#), Berossus himself seems to have engaged with Stoic ideas.⁶⁶ More significantly, some of the Stoics linked with Hellenistic Pergamon engaged with Babylonian thought. We have noted Chrysippus’ apparent awareness of Babylonian birth omens; beyond this, Crates’ writings display a particular interest in Chaldaeans, and his pupil Zenodotos of Mallos purportedly claimed that Homer was Chaldaean.⁶⁷ Although there is no direct evidence that these scholars read Berossus, the chronology and the cross-pollination of Stoic and Chaldaean ideas

⁶³ Schironi 2009: 16–19.

⁶⁴ *FGrHist* 244. The claim that Apollodorus spent a long time with Aristarchus is from Pseudo-Scymnus’ *Periegesis* (*FGrHist* 244 T2, 21), which also provides the evidence for the dedication to Attalus (T2, 46–48). Further support for an Alexandrian connection comes from the list of Alexandrian Librarians from Oxyrhynchus, which names Apollodorus among several *grammatikoi* who flourished at the time of Euergetes II (*FGrHist* 244 T4).

⁶⁵ Schironi 2009: 14. ⁶⁶ See page 104.

⁶⁷ Chrysippus: see page 72. Crates: Schironi 2009: 14 n.5; Zenodotos: Sch. AT ad II. 23.79b, although Kim argues that Zenodotos is using ‘Chaldaean’ for ‘astrologer’ here (Kim 2010: 165 n.89).

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create a suggestive link to Pergamon which is so far not paralleled at Alexandria. Another person who certainly did read Berossus can also be cautiously linked with Pergamon. Alexander Polyhistor, Berossus' epitomator, is said by the *Suda* to have been one of the 'pupils of Crates', and a Pergamene connection would also make sense geographically, given his origins in Miletus.⁶⁸ Finally, as we will see in [Chapter 5](#), there is some evidence to link a Chaldaean diviner, Sudines, to the Attalid court. These considerations make Hellenistic Pergamon a more plausible intellectual milieu than Alexandria for interest in Berossus.

Where does this leave us with the question of Hellenistic royal libraries as key sites for cultural exchange? For Alexandria, Jensen's conclusion sums up the situation neatly: 'the impression we get in the sources does not confirm the picture of the Library as an important participant in the great interaction of cultures and religions'.⁶⁹ All the evidence points to a focus on Greek texts and Greek scholars, with primarily Greek interests. This Hellenic focus, and Ptolemaic cultural policy more broadly, have often been viewed in political terms. Rudolf Blum suggested that the Museum was intended to demonstrate the superiority of Greek culture to justify Ptolemaic rule over Egypt, while Andrew Erskine viewed the Library and Museum as the result of Hellenised Ptolemaic cultural imperialism in a context of inter-dynastic competition.⁷⁰ Herwig Maehler's model of 'cultural defensiveness' is less cogent; the consistent willingness of Ptolemaic kings to utilise Egyptian cultural idioms does not suggest great anxiety about Egyptian assimilation.⁷¹ Whatever the exact motivations, the key point is that the cultural politics of Ptolemaic Alexandria were heavily if not exclusively Hellenocentric. Even if the translation of the Septuagint did take place under Ptolemaic auspices, the exceptional nature of the Ptolemies' relationship with the Jews and Judaea means that this could not stand as evidence for a general interest in foreign works. It is quite possible, even probable, that works by foreign

⁶⁸ *Suda* s.v. 'Αλέξανδρος ὁ Μιλήσιος. Polyhistor is too late to have literally been Crates' pupil, but may have studied at Pergamon or followed his teachings.

⁶⁹ Jensen 2009: 89. ⁷⁰ Blum 1991: 98; Erskine 1995. ⁷¹ Maehler 2004: 6–7.

authors like Manetho or Berossus at some point circulated in Alexandria and perhaps formed part of the Library, but there is no evidence of significant or sustained Ptolemaic initiative in commissioning, acquiring or studying such texts.

The hints of a connection between Berossus and Pergamon and the interest in foreign words among the Pergamene grammarians raise the tantalising possibility that the Library of Pergamon and its Attalid patrons were more receptive to Chaldaean or other foreign scholarship. At the same time, what is known of scholarship in Hellenistic Pergamon and the competitive relationship between the Attalid and Ptolemaic intellectual centres suggests a primarily Hellenic focus here too.⁷² For the libraries at Pella and Antioch, there is insufficient evidence to draw any firm conclusions, but there is no reason to suspect that they were drastically different, given the overall context of royal competition over Greek *paideia*.⁷³ The royal libraries of the Hellenistic world undoubtedly stimulated book production and the circulation of texts and intellectuals. This in turn may have facilitated greater cultural interchange in the intellectual sphere. Yet there is little to no evidence that such interchange was mediated through these libraries or their patrons, rather than through other institutions or individuals. Overall, it seems unlikely that the Library of Alexandria or its competitors were designed to be, or became, key conduits for the Greek reception of Mesopotamian texts, knowledge and ideas.

If the dynasts and their scholars were not aiming to collect and analyse Mesopotamian literature and thought, however, there is the possibility of a subtler yet more fundamental cross-cultural link. Were the Library and Museum of Alexandria modelled on the text collections and intellectual institutions which the Macedonians encountered in the Near East?

⁷² Attalid imitation of Alexandria: Erskine 1995: 46; on Attalid-Ptolemaic competition, see pages 203–4. On the Library of Pergamon see Nagy 1998 (conception and foundation); Coqueugniot 2013 (location).

⁷³ Nothing is known about the Antioch library except the name of a single librarian, Euphoriion, under Antiochus III (on whom see page 206; Pfeiffer 1968: 122).

4.3 From Aššurbanipal to Alexandria? The Case for Mesopotamian Influence

When Greek and Roman authors discussed the precursors and origins of the great Hellenistic libraries, they did so in entirely Greek terms. Strabo sees the Alexandrian project as inspired by Aristotle, ‘the first man we know to have gathered together books, teaching the kings in Egypt how to put together a library’.⁷⁴ Athenaeus goes further, claiming that Aristotle’s books themselves ended up in Ptolemaic hands.⁷⁵ Elsewhere it is the sixth-century tyrant Peisistratos who is presented either as the Ptolemies’ inspiration or more generally as the *protos heurates* of book-collecting.⁷⁶ Taking a more overarching perspective, Athenaeus’ list of those ‘who inspired wonder at their collecting (*synagoge*)’ situates the Pergamene and Ptolemaic royal libraries within a wholly Greek tradition stretching back to Polycrates of Samos.⁷⁷

A narrative of purely Greek origins is hardly unexpected, given the confluence between political and cultural power in large-scale text collecting, and the authorising effect of being able to link such projects to prior tradition. This is particularly relevant for Alexandria, where the representation of the Library as heir to the book collections of the Old Greek world ‘helps to authorize Ptolemaic Egypt and Alexandria as a Greece transformed’.⁷⁸ Nevertheless, it is worth noting the contrast with other aspects of Greek culture where authors asserted or speculated about Near Eastern origins or influences, such as religion, the alphabet or astronomy and astrology.⁷⁹ Classical writers were aware that in Egypt and Mesopotamia written records were accumulated over long periods of time,⁸⁰ but apparently never detected (or wished to

⁷⁴ Strabo 13.1.54 (the term διδάξας need not imply Aristotle’s chronologically impossible involvement with Ptolemaic book-collecting: cf. Fraser 1972 II: 473 n.100).

⁷⁵ Ath. 1.3a–b. ⁷⁶ Tert. *Apol.* 18.5; Isid. *Etym.* 6.3.3; Gell. *NA* 7.17. ⁷⁷ Ath. 1.3a.

⁷⁸ Too 2010: 31.

⁷⁹ E.g. Egyptian origins of elements of Greek religion (Hdt. 2.42–3; 49–58); Babylonian origins of astronomy (Plin. *HN* 6.121); Phoenician origins of the alphabet (Hdt. 5.58; cf. Pfeiffer 1968: 21–2).

⁸⁰ E.g. Hdt. 2.82, 100 (Egyptian records); Diodorus 2.30–1 (Babylonian celestial observations – written records are not explicitly mentioned but are presupposed by how far the observations go back).

detect) influence on their own practices: book-collecting and libraries are never linked to either culture in a genealogical sense. Even in Gellius, who incorporated Near Eastern monarchs into his history of libraries, the Persian king Xerxes' appropriation of the Athenian library appears only as an interlude between Peisistratean invention and Seleucid repatriation; the library itself remains fully Greek.⁸¹

Notwithstanding their ideological concerns, ancient authors' emphasis on Greek precursors for the Library of Alexandria fits what we know about earlier Greek text collections and Alexandria itself. Although later accounts of early Greek book collections are likely to include retrojections of Hellenistic practice,⁸² libraries definitely existed in the Greek world before Alexandria. Peisistratos' 'library' is a doubtful case, but by the fourth century we are on firmer ground; whatever eventually happened to Aristotle's books, there was certainly a collection of Peripatetic writings associated with the Lyceum.⁸³ Royal book-collecting in Argead Macedon may also be an important precursor for Alexandria, if only we knew more about it.⁸⁴ Besides the clear evidence for pre-Alexandrian Greek libraries, the Hellenic aspirations of the Alexandrian Library and the Museum which probably housed it are incontrovertible. There are strong links with Greek precedents, particularly the Peripatos: the naming of the Museum; its layout and organisation, and the Peripatetic figures associated with Ptolemaic intellectual enterprises.⁸⁵ All known librarians and scholars connected with the Museum are Greek, and as we have seen, the evidence for book acquisition points to a focus on Greek material.⁸⁶

⁸¹ Gell. *NA* 7.17 (also Isid. *Etym.* 6.3.3–5, dependent on Gellius or a common source).

⁸² Pfeiffer 1968: 6–8; Hunter 2011: 52.

⁸³ Pfeiffer 1968: 67; Fraser 1972 I: 320, with Gottschalk 1972: 317 on the authenticity of the scholars' wills, which mention the books.

⁸⁴ The first mention of the library of Pella in our surviving sources is when it passes to the Romans (Plut. *Aem.* 28.11), but given their engagement with Greek literature and philosophy, it is likely that the fourth-century kings of Macedon collected books.

⁸⁵ Fraser 1972 I: 312–17; Erskine 1995: 39–40.

⁸⁶ Ptolemies: Gal. *Hipp. Epidem.* 3.606–7 (books seized from ships, Euergetes and Athenian tragedians' texts); Ath. 1.3b (Philadelphus' purchases: Aristotle's books; books from Rhodes and Athens). Cf. for the Attalids Strabo 13.1.54 (Aristotelian books). Remarks on the increase in forgeries caused by Ptolemaic and Attalid

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There is no question, therefore, about the Hellenic stream of influence for Alexandria and the other Hellenistic royal libraries, and modern scholarship has generally followed the ancient sources in viewing them within a solely Greek tradition.⁸⁷ At the same time, there are also non-trivial discontinuities between Alexandria and its Greek precursors, including the vast scale of the book collection amassed by the Ptolemies; the economic and legal relationship between the Museum/Library and the state, and the fact that the Museum departed in significant ways from its Peripatetic roots.⁸⁸ As a result, some scholars have argued for a ‘two-stream’ or ‘mixed’ inheritance for Alexandria, and by extension the other royal libraries.⁸⁹ They posit influence from both Hellenic and Near Eastern (Mesopotamian and/or Egyptian) sources, usually with a rough division of labour between intellectual (Hellenic) and institutional (Near Eastern) aspects.

The ‘two-stream’ model has been restated and refuted in various forms. The most simplistic versions homogenise ‘Mesopotamian’ or, worse, ‘oriental’ libraries into a single mass and commit serious errors and anachronisms.⁹⁰ On the other hand, similar errors occur in works which present the opposite case, so that the grounds on which eastern influences have been denied are sometimes equally flawed.⁹¹ Furthermore, more sophisticated variants of the ‘two-stream’ model have been proposed in recent years, and there are signs of their greater acceptance in mainstream

competition also attest to kings’ interest in the Greek book-trade: cf. Fraser 1972 II: 481 nn.150–1.

⁸⁷ E.g. Thompson 1940: chs. 1–2; Van Rooy 1958; Fraser 1972 I: 312–15, 320; Erskine 1995; Griffin 1996; Casson 2001: chs. 2–3.

⁸⁸ On the relationship between the Peripatos and Alexandria, see Brink 1946; Van Rooy 1958; Lynch 1972: 121–3; cf. Hunter 2011: 52: ‘The importance of Athenian institutions as models . . . is well recognised, but how self-consciously that paradigm was elaborated is less clear.’

⁸⁹ Two stream: De Vleeschauwer 1977: 176; mixed inheritance: MacLeod 2000: 2.

⁹⁰ De Vleeschauwer 1977 and Staikos 2004: 161 present homogenising and chronologically impossible lists of ‘libraries’ which they seem to imply were inherited by the conquering Macedonians.

⁹¹ For example, Van Rooy denies eastern influence on the grounds that what he calls the ‘Near-Asiatic library’ represented a ‘deceased’ library tradition, and that the Macedonians could not have found there the ‘spirit’ of universal research characteristic of the Alexandrian library (Van Rooy 1958: 160–1); El-Abbadi (1990: 75) draws the same contrast in terms of ‘research’. Both claims are incorrect since contemporary cuneiform libraries existed and functioned as centres of textual and empirical research.

scholarship.⁹² While Rudolf Pfeiffer in 1968 regarded the question of Near Eastern influence as still open, Roy MacLeod wrote in 2000 that ‘rival “Greek” and “orientalist” theories of genesis have been by and large resolved in favour of a view that sees Alexandria as the beneficiary of a mixed inheritance’.⁹³ These more recent contributions, together with the previous misconceptions on both sides of the debate, justify a fresh examination of the topic. In line with our focus on Mesopotamian–Greek connections, the following discussion deals with the case for influence from Mesopotamia; although much of the argumentation is also applicable to Egypt, a fuller re-examination of the case for Egyptian influence remains a desideratum.

4.3.1 Framing the Comparison

Since the text collections under discussion are in many ways heterogeneous, it is important to formulate a working definition of ‘library’ by which to establish their basic comparability, and a set of criteria on the basis of which meaningful similarities and disparities can be identified. This is complicated by the fact that in the western world the library as both concept and institution traces its history from the book collections of Greece and Rome, and above all from the Library of Alexandria itself. Alexandria is archetypal for western conceptions of what constitutes a library, and the terminology we use to describe libraries ultimately derives from sources which already looked to it as a paradigm. This has led some modern scholars to approach ancient text collections with a single and largely intuitive model of ‘library’ derived from the Classical sources. Such an approach both privileges and homogenises Greek and Roman libraries and creates two major problems for cross-cultural studies.

First, a single and Classically derived model of ‘library’ encourages the formation of teleological narratives where all the evidence is fitted into one developmental sequence, culminating with the libraries of the Classical world. The text collections of the

⁹² Beaulieu 2006b; Clancier 2009b: 295–7; Goldstein 2010 (Mesopotamian influence); Shubert 1993 (Egyptian influence).

⁹³ Pfeiffer 1968: 126; MacLeod 2000: 2.

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Ancient Near East therefore often appear in histories of ancient libraries as part of the ‘pre-history’ of Alexandria. There are various permutations: Near Eastern collections may be viewed as unrelated phenomena which are disqualified from ‘library’ status,⁹⁴ imperfect evolutionary stages on the journey to the ‘library’ proper,⁹⁵ or libraries in their own right which inspired or even transcended the ultimate (Greek) realisation of the concept.⁹⁶ But in all these cases Near Eastern libraries are classified according to their relative distance from the writer’s conception of ‘library’ in general or the Library of Alexandria in particular (conceptions which often converge). Another result of such linear narratives is that the history of Mesopotamian libraries appears to stop with the arrival of Alexander, as the art of library formation passes to the Greeks, only to return to the east with the great Arab libraries of the medieval period; the existence of cuneiform libraries in Hellenistic Mesopotamia often goes unremarked. To some extent this pattern is a product of the more limited cuneiform evidence available to earlier scholars, but can still be found in more recent works: for example, Lionel Casson draws on Hellenistic cuneiform collections but makes nothing of the fact that these libraries were contemporary with the Library of Alexandria.⁹⁷

A second problem with comparisons which proceed from a monolithic and intuitive model of ‘library’ is a lack of both nuance and consistency, as the primary issue becomes the somewhat reductive question of whether a given collection qualifies as a ‘library’ or not.⁹⁸ Without explicitly agreed definitions, one person’s ‘library’ may be another’s ‘book collection’ or ‘archive’, and so the results of

⁹⁴ E.g. Thompson 1940; Griffin 1996.

⁹⁵ A variety of versions of the ‘imperfect ancestor’ model exist: for Casson, Mesopotamian libraries deserve ‘honorable mention’ as the first to use some ‘fundamental library procedures’ (2001: 15); for El-Abbadi, the Alexandrians’ attitude to their heritage sets them apart from both Classical Greek and Near Eastern antecedents (El-Abbadi 1990: 105).

⁹⁶ E.g. Bushnell 1928: 196; Staikos 2004: 161; Jensen 2009: 81.

⁹⁷ Casson 2001: 13–16.

⁹⁸ The title of Jastrow’s 1906 article, ‘Did the Babylonian Temples have Libraries?’, exemplifies the binary framework (Jastrow 1906); Thompson (1940: 1–15) discusses several Egyptian and Mesopotamian ‘libraries’ in some detail but ultimately concludes that these ‘were not true libraries’ (15).

comparative studies of the same material differ widely, as exemplified by the different positions accorded to Near Eastern libraries within the evolutionary schema quoted above.

During recent decades, a number of factors have contributed to the breaking down of the concept of 'library' and the formation of more explicit definitions and increasingly refined typologies. In the light of post-colonial studies and the work of Foucault, the text collections of Greece and Rome, and in particular the Library of Alexandria, have been studied in terms of the power relations inherent in the gathering and organisation of written knowledge.⁹⁹ Analyses of this kind encourage a greater focus on, and hence distinction between, the varying aims and functions of libraries. Meanwhile, our understanding of Mesopotamian libraries has been enhanced by the excavation, publication and analysis of further assemblages of scholarly cuneiform tablets.¹⁰⁰ Building on this work, an increasing number of synthetic and comparative studies have proposed more differentiated typologies and emphasised variation in user communities, contents and functions for the libraries of Assyria and Babylonia.¹⁰¹

The evolution of 'library' from monolithic to multiform concept has yielded a plethora of explicit and precise definitions and approaches. This multiplicity brings its own difficulties; as Maria Brosius notes, despite greater interdisciplinary dialogue, a shared and stable terminology is still a desideratum.¹⁰² Definitions naturally tend to vary by discipline according to the

⁹⁹ E.g. on Alexandria, Erskine 1995; MacLeod 2000: 3; Blum 1991: 95–8; Maehler 2004. Too (2010: ch. 1) examines ancient narratives about the foundation of libraries as evidence for the 'confluence between intellectual and political power in antiquity' (31).

¹⁰⁰ Important later twentieth-century finds for the study of Mesopotamian libraries were: 1. Around 140 scholarly tablets discovered in a storeroom at the Rēš temple in Uruk (Clancier 2009b: 35–7; tablets published in Van Dijk and Mayer 1980); 2. Almost 500 Achaemenid and early Hellenistic scholarly tablets belonging to two families of *āšipu* priests found in a private house in Uruk (cf. Robson 2008b: 227–40; Clancier 2009b: 30–3; tablets published in Hunger 1976; von Weiher 1983; 1988; 1993; 1998); 3. Around 800 Neo-Babylonian scholarly tablets found still in niches in a storeroom of the E'ulmaš temple in Sippar (bibliography collected in Fadhlil and Hilgert 2008: 154, nn.*–1).

¹⁰¹ Veenhof 1986 called for more differentiation between cuneiform 'libraries', making the distinction between private and palatial collections; the heterogeneity of the assemblages surveyed in Pedersén 1998, the first and still the most complete study of Near Eastern libraries and archives, highlighted the need for finer mesh distinctions, which recent works have sought to develop, e.g. Clancier 2009b; 2010; Robson 2013; Robson and Stevens 2019.

¹⁰² Brosius 2003: 3.

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distribution of the evidence. While various cuneiform text collections have been excavated *in situ*, there are few references to libraries in cuneiform literature (although Akkadian does have a term we might translate as ‘library’: *gerginakku*, a Sumerian loanword which refers to a room in which scholarly tablets were deposited – usually in a temple – and the collection housed therein).¹⁰³ As a result, with more information regarding collections’ composition and organisation, and less about their users or functions, Assyriological definitions focus on context and content. Excavated groups of tablets are classified as ‘libraries’ or ‘archives’ based on the content of the tablets (scholarly vs administrative/economic), although ‘library’ and ‘archive’ tablets are often found in the same context, and a tablet might originally be ‘archival’ but later form part of a ‘library’.¹⁰⁴

For the Classical world, the situation is the reverse. Almost no Greek and Roman text collections have been found *in situ*; where the buildings which housed them survive, the texts themselves have generally perished, and where assemblages of texts are found, the context is usually lost.¹⁰⁵ References in literary and epigraphic texts afford considerable insight about users and functions, but less about the composition and organisation of collections.¹⁰⁶ Classicists’ definitions of ‘library’ therefore tend to focus on function and conceptualisation. The division between ‘library’ and ‘archive’ also falls in a different place for Greek and Roman historians; outside papyrological circles, where its usage parallels that in Assyriology, ‘archive’ often means a collection of epigraphic texts inscribed in a single location, rather than a set of textual

¹⁰³ CAD G s.v. *gerginakku*; cf. Robson 2013: 41.

¹⁰⁴ Parpola (1986: 234) suggests that certain ‘archival’ texts from the reign of Sargon found in Aššurbanipal’s North Palace at Nineveh had been kept as ‘antiquities’; cf. the Late Babylonian ‘copies’ of Neo-Assyrian letters about tablet-collecting discussed in this chapter, some or all of which may reflect Assyrian administrative correspondence.

¹⁰⁵ The carbonised library preserved at the Villa of the Papyri at Herculaneum is the major exception (cf. Zarmakoupi 2011, with bibliography); most papyri derive from secondary contexts and cannot reveal the structure of original collections. The impressions of literary and philosophical papyri in the dust of the treasury at Ai Khanoum (cf. Rapin 1992: 115–21; Bernard 2002: 81) yield a glimpse of the range of possible contexts for Hellenistic Greek text collections, and a reminder of how much has been lost.

¹⁰⁶ On Roman libraries see e.g. Nicholls 2011, Nicholls 2013 and the other papers in König, Oikonomopoulou and Woolf 2013, Parts II and III.

material excavated from a single context or thought to have belonged to one in antiquity.¹⁰⁷ The difficulty, then, is which definition to take as a starting point for interdisciplinary comparison. ‘A collection of texts normally with multiple copies for use in different places at different times’, consisting of ‘literary texts in a broad sense’?¹⁰⁸ ‘A room ... in which scholarly tablets were deposited, and the contents of that collection?’¹⁰⁹ ‘A collection of works that were kept handy for consultation?’¹¹⁰

In order to leave open for comparison the wide range of elements that have been used to posit Mesopotamian influence on Alexandria, I take a broad functional definition of a library as ‘a collection of texts assembled and utilised for the purposes of scholarship’. Here, ‘texts’ covers inscribed objects in all media, and ‘scholarship’ is understood to include not only the activities of copying, editing and commentary, but all forms of analytical and interpretative engagement, as well as original composition in all genres. The quantity, content and physical setting of texts; the social and economic configuration of the intellectual community and its relationship with political structures; and the intellectual and cultural functions of the collections will all constitute possible criteria by which to assess the degree of cross-cultural similarity, and hence the likelihood of Mesopotamian influence.

4.3.2 *The Mesopotamian Comparanda*

The cuneiform tablet collections which can be classified as libraries under our loose definition are extremely heterogeneous in form and function, ranging from vast palace holdings, to temple libraries which supported various cultic and intellectual activities, to small-scale private collections used for reference and advanced professional training.¹¹¹ In theory, this yields an array of

¹⁰⁷ Brosius 2003: 9. ¹⁰⁸ Pedersén 1998: 3. ¹⁰⁹ Robson 2013.

¹¹⁰ Casson 2001: 3.

¹¹¹ The range is apparent from the material in Pedersén 1998; cf. Robson and Stevens 2019. Clancier 2010 offers a tripartite typology of palace, temple and private libraries. The distinctions between these categories are far from absolute, and tablets often

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Mesopotamian comparanda for Alexandria. In practice, however, comparative work has centred on two text collections, one Assyrian, one Babylonian, which are distinguished by their large scope and scale. Accordingly, the case for Mesopotamian influence on the Hellenistic royal libraries rests on these two collections and their respective intellectual centres.

The first comparandum is the so-called library of Aššurbanipal. During the 1850s, some 30,000 cuneiform tablets and fragments were discovered during excavations on the mound of Kuyunjik near Mosul, the site of the Neo-Assyrian royal capital of Nineveh.¹¹² These tablets represented several originally discrete collections and included archival and scholarly material from the reigns of several rulers, but many were part of a large collection of scholarly tablets from Assyria and Babylonia (then under Assyrian rule) amassed by the Assyrian king Aššurbanipal (r. 668–627 BC).¹¹³ In something of an Assyriological equivalent to the romance surrounding the Library of Alexandria, this led to the Kuyunjik tablets being conceptualised as a single, massive ‘Library of Aššurbanipal’.¹¹⁴ To some extent the romance persists, although ongoing study of the tablets and excavation records has enabled discrete groups to be identified within the material; the tablets which can be assigned to the North and South-West Palaces are now sometimes referred to as the ‘proper Library of Aššurbanipal’.¹¹⁵ Although we cannot draw precise or complete

circulated between ‘private’ and ‘institutional’ contexts; see Maul 2010; Robson and Stevens 2019.

¹¹² Reade 1998: 390–4 summarises the history of excavations at Nineveh.

¹¹³ On the Kuyunjik tablets, see Reade 1986; Reade 1998: 421–7; Parpola 1986 (archive tablets); Pedersén 1998: 158–65 (overall survey); Fincke 2003; Fincke 2004 (tablets in Babylonian script). The British Museum’s Ashurbanipal Library Project is recataloguing and editing the Nineveh tablets: (www.britishmuseum.org/research/research_projects/all_projects/ashurbanipal_library_phase_1.aspx).

¹¹⁴ For the history of the idea of ‘Aššurbanipal’s Library’, see Robson *in press*: ch. 1.

¹¹⁵ Lieberman distinguishes between a) the tablets whose colophons state that they were dedicated on Aššurbanipal’s behalf in the temple of Nabû at Nineveh, and b) those designated as belonging to the palace, which he regards as the “personal” holdings of Assurbanipal’ (Lieberman 1990: 317–19); similarly, Fincke states: ‘It is the tablet collection of the South-West Palace that formed the Ashurbanipal library, but tablets from the North Palace are also considered to belong to this library’ (Fincke 2003: 114). However, Reade (1998: 421) cautions that the assignment of tablets to collections must await systematic publication. Since many of the modern works under discussion conceptualised the scholarly tablets from Neo-Assyrian Nineveh as a single ‘Library

conclusions about the original tablet groupings at Nineveh, cuneiform sources from here and elsewhere yield considerable information about Aššurbanipal's acquisitions, the nature of the royal collections, and the lives and work of the court scholars who edited and used these texts in their roles as advisors and (ritual and medical) protectors of the kings. 'Aššurbanipal's Library', either in the narrower sense or denoting all the scholarly tablets from Kuyunjik, has been the most commonly chosen comparandum for the Hellenistic royal libraries.¹¹⁶

The second comparandum is the library associated with the Esagila temple in Babylon during the late first millennium BC.¹¹⁷ Whereas the library of Aššurbanipal is a problematic construct because it consists of a huge mass of tablets from several once separate libraries, the library of Esagila is problematic because in one sense it has not yet been discovered. Esagila has never been fully excavated, and the Achaemenid and Hellenistic scholarly tablets discovered in Amran (the quarter in which Esagila is located) probably came not from the sanctuary itself but from the nearby houses of scholars who worked in the temple.¹¹⁸ Nonetheless, the existence of an important scholarly tablet collection or collections in Esagila during the first millennium can be inferred from references in cuneiform tablets from Babylon to copies from the temple and the dedication of votive tablets. While these permit no conclusions about its size or history, they provide considerable information about the functioning of Esagila as an intellectual institution and the type of scholarly material preserved and produced by its personnel.¹¹⁹ As many of the suggested points of contact are the same for Nineveh and Esagila, we will treat them together when

of Aššurbanipal', the singular is used here when citing their arguments. The plural 'libraries of Aššurbanipal' is used in the analytical discussion to refer to the collections of scholarly tablets used and acquired by Aššurbanipal and his court, and 'libraries of Nineveh' to indicate the scholarly tablets recovered from the royal citadel more generally, with the caveat that these categories cannot yet be distinguished clearly on the basis of the existing evidence.

¹¹⁶ De Vleeschauwer speaks of 'the oriental library', but it is clear that his Mesopotamian paradigm is the 'library of Assurbanipal', the only Mesopotamian library he mentions by name (De Vleeschauwer 1977). Beaulieu 2006b also draws links with Aššurbanipal.

¹¹⁷ Esagila is the main comparandum in Beaulieu 2006b and Clancier 2009b: 295–7.

¹¹⁸ Clancier 2009b: 144–50, 180–1 (although Clancier regards it as possible that the area where the tablets were found was part of the sanctuary); Robson *in press*: ch. 5.

¹¹⁹ E.g. Hunger 1968 nos. 151, 156, 157.

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assessing the degree of similarity between the Hellenistic royal libraries and their putative precursors in Mesopotamia.

4.3.3 *Mechanisms of Influence*

Before comparing the libraries themselves, it is necessary to establish a plausible mechanism of influence. How could either or both of these cuneiform collections have provided inspiration for the Hellenistic kings? Existing reconstructions centre on what Herman de Vleeschauwer calls the ‘Ptolemaic thesis’: Ptolemy I was inspired by his own knowledge and/or experience of Mesopotamian tablet collections to incorporate some of their features in the Alexandrian Museum and Library.¹²⁰ Although Ptolemy’s presence in Babylon at a time when Esagila was still an active intellectual institution makes this a plausible route for Babylonian influence, questions immediately arise about the Assyrian model. The Neo-Assyrian royal libraries had been destroyed and abandoned with the rest of the city of Nineveh at the end of the seventh century when the Assyrian empire fell to the Medes and Babylonians. It is difficult to see how Aššurbanipal’s Library could have been a paradigm for Alexandria when Nineveh had been sacked and the tablets buried in the rubble hundreds of years previously.¹²¹

It is true that Alexander and his companions could have had no direct access to the thousands of tablets lying beneath the ruins at Nineveh, which were not to be rediscovered for another two millennia. However, Paul-Alain Beaulieu’s modified model of Assyrian influence relies not on direct contact but on a cultural memory of Aššurbanipal’s tablet collecting in Hellenistic Babylonia, for which there is compelling evidence.¹²² From Uruk, which was home to a group of Assyrian expatriates after the fall of the empire and where a cult and temple to Aššur continued in the sixth century, there are implicit but strong indications that Late Babylonian scholars had an awareness of Assyrian royal scholarship and of

¹²⁰ De Vleeschauwer 1977; Beaulieu 2006b: 31–2.

¹²¹ As observed by Shubert 1993: 148. ¹²² Beaulieu 2006b: 28, n.39.

Aššurbanipal as a collector of texts.¹²³ Tablets from the city include several copies of omen series which reflect Ninevite textual traditions,¹²⁴ a copy of an Aššurbanipal royal inscription and even an original tablet from Nineveh whose colophon states that it belonged to the palace of Aššurbanipal.¹²⁵ A more explicit memory of Aššurbanipal's intellectual acquisitiveness is attested by two Hellenistic or Parthian tablets which purport to be copies of royal correspondence regarding the copying or acquisition of scholarly tablets from Babylonia for Aššurbanipal's palace. One is a letter from the Borsippans to Aššurbanipal; the other is badly damaged but seems to be a letter from Aššurbanipal to the scholars of Babylon.¹²⁶ Also relevant are two copies of a letter order from an unnamed Assyrian king (possibly Aššurbanipal) requisitioning tablets from Borsippa.¹²⁷

The historical authenticity of all these letters is disputed; even if based on genuine originals, they may have been reworked, and certainly cannot be taken as unproblematic evidence for seventh-century reality, an issue to which we will

¹²³ On the Assyrian expatriate community and the Aššur temple in Uruk, see Radner 2017: 83–4, who suggests that the temple was established not during Assyrian rule (as posited by Beaulieu) but after the fall of the empire. Radner also argues (2017: 85–90) that 'Temple A' at Assur, founded sometime after the fall of Assyria and functional until the first century BC when it was integrated into a broader complex for the god then known as Assor, was a new temple to Aššur established after the Persian conquest when Cyrus permitted the re-establishment of local cults in north-east Mesopotamia. A large number of old cuneiform texts relating to the cult of Aššur and Assyrian history seem to have been deliberately relocated to the temple, suggesting continued knowledge of cuneiform and Akkadian. Such continuity of cult practice and scholarship in Assyria itself provides another mechanism for the cultural memory of Neo-Assyrian royal scholarship and its associated text collections.

¹²⁴ Beaulieu 1997; 2010.

¹²⁵ Beaulieu 1997: 65–6; Beaulieu 2010: 4–15; Frahm 2011a: 524. However, as Beaulieu acknowledges (2010: 14–15), the lack of earlier first millennium Babylonian libraries makes it difficult to establish the relationship between Ninevite and earlier Babylonian scholarship.

¹²⁶ Frame and George 2005 nos. 1 (BM 45642) and 2 (BM 28825). Frame and George regard the second letter as a response from the Babylonians to Aššurbanipal, but the opposite (Frahm 2005: 43 with n.1) makes better sense of the preserved text.

¹²⁷ CT 22, 1, based on two identical tablets in the British Museum; transliteration of individual exemplars in Lieberman 1990: 334–6; composite transliteration and translation in Frame and George 2005: 280–1. Both were purchased with other Borsippa tablets, including contracts from the time of Nabonidus; the date is based on palaeography.

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return below.¹²⁸ Moreover, as the surviving copies of the Aššurbanipal letters may postdate the foundation of the Hellenistic royal libraries, the image they present of Aššurbanipal's text collecting could even have been influenced by knowledge of the Library of Alexandria rather than the other way around.¹²⁹ What they do show is that at the time of the Macedonian conquest Aššurbanipal was still remembered as a collector of scholarly tablets among the Babylonian temple elite; hence, they provide sufficient grounds not to rule out Nineveh as a model for Alexandria.

As Esagila was still an active centre of scholarship when Alexander conquered Babylon, it is less difficult in principle to imagine it as a source of inspiration for the Hellenistic royal libraries. It is very doubtful, however, that any such inspiration was acquired through first-hand experience. Access to Babylonian temples was strictly limited to those who fulfilled certain economic and ritual criteria.¹³⁰ It is therefore extremely unlikely that Ptolemy, or any other Macedonian or Greek, would have seen the locations within the sanctuary where the tablets of Esagila were stored and studied.¹³¹ Even if they had, it is not clear that the encounter would have been particularly memorable. Since Esagila has not been properly excavated, the exact disposition of tablet storage spaces there is unclear, but if other Babylonian temples are anything to go by, scholarly tablets were kept in small, unprepossessing storage rooms, dispersed throughout the sanctuary. At the temple E'ulmaš in Sippar, some 800 scholarly tablets from the Neo-Babylonian and Achaemenid periods were found *in situ* in their niches, in rows several deep, in a room only 1.5 m by 1 m.¹³² E'ulmaš was only

¹²⁸ Lieberman 1990: 312–13 proposed that the letter order to Borsippa was from Esarhaddon, or a 'Babylonian fantasy'; Frame and George 2005 regard all the letters as authentic (also suggesting Esarhaddon for the letter order); Frahm (2005: 44 with n.9) suggests that they are based on real letters, pointing to indirect evidence for copying from an Assyrian original. Goldstein 2010 also argues for Hellenistic reworking.

¹²⁹ As argued by Goldstein 2010; see further pages 189–90.

¹³⁰ Waerzeggers 2011: 62–8.

¹³¹ There were probably multiple collections; Clancier 2010: 9 distinguishes between the library owned by the god, and working libraries related to a given profession.

¹³² Anonymous 1987: 248–9; Pedersén 1998: 194–7.

a minor temple, but assemblages of scholarly tablets have been excavated from comparable contexts in the much larger Rēš temple at Uruk, and it is safe to assume that the situation would have been similar at Esagila.¹³³

If Ptolemy knew of the cuneiform collections of either Nineveh or Esagila, then, it would have been at second or third hand, from local Babylonian sources. We have a possible mechanism for influence, but how likely is it? Given the reports in our sources about Alexander's positive relationship with the Chaldeans and their presence at court in Babylon, it is highly probable that Ptolemy and other Macedonians came into contact with members of the Babylonian temple elite.¹³⁴ Whether or not the conversation turned to matters of scholarship is of course unknown. As a final cautionary note, it is worth recalling the silence of the Classical sources about cuneiform libraries. Greek and Roman authors knew that the Chaldeans kept extensive textual records, but they are always vague about the specifics. The absence of a Mesopotamian analogue to Hecataeus of Abdera's description of an Egyptian temple library might suggest that no detailed knowledge of cuneiform libraries was available.¹³⁵ But since silences can be misleading, the core of the case for influence must turn on the comparison of the libraries themselves.

4.3.4 Nineveh, Esagila and Alexandria: the Case for Influence

The suggested similarities between the Alexandrian Library and Museum and the libraries of the Neo-Assyrian court and Esagila fall into four main categories: the relationship between the intellectual institutions and the state; the religious dimension to intellectual activity; aspects of bibliographic practice, and the scope and purpose of the libraries. We will examine each of these in turn, beginning with the broader institutional and intellectual characteristics, before homing in on the text collections themselves.

¹³³ Rēš: Pedersén 1998: 209–11 (Uruk 4).

¹³⁴ On Alexander's relationship with the Chaldeans, see pages 229–31.

¹³⁵ Diod. Sic. 1.49.3–5 (although here too we learn little about the library itself); for Greek and Roman sources on Babylonian record-keeping, see page 34.

4.3 From Aššurbanipal to Alexandria?

4.3.4.1 *Relationship to Political Power*

The relationship between the Alexandrian Museum and Library and the Ptolemaic royal house has been singled out as a departure from previous Greek practice and a point of contact with Mesopotamia. For De Vleeschauwer, ‘The idea of royal or state initiative in matters of literature, the sciences, and libraries, while not conforming to Greek models, answers very well to oriental antecedents.’¹³⁶ In a similar way, Beaulieu views Alexandrian learning as Hellenic in its intellectual foundations, but supported by institutions more reminiscent of the temples of Babylonia or the scholarly communities of the Assyrian court than the Greek cities of the Classical period.¹³⁷

At Alexandria, the level of involvement with and financial support for an intellectual *institution* by a political power was certainly new compared with Classical Greek precedent. The Athenian Lyceum was owned and managed by its members, while the intellectual patronage of previous Greek and Macedonian tyrants and kings was individual and informal; as Peter Fraser observed, the Hellenistic kings inaugurated a new form of intellectual patronage by establishing ‘permanent foundations of learning’.¹³⁸ What is less clear is how far these foundations represented a sharp break from previous practice rather than a gradual development. Since the thesis of Mesopotamian influence relates to the Alexandrian Museum and Library as originally conceived by Ptolemy I, the question arises of when and how their institutional character became apparent.

Certainly, in their final form, the Museum and Library were more or less independent; this was probably already the case by the second quarter of the third century when Zenodotos is attested as the earliest known Librarian and the poet Herodas could list the Museum as one of Egypt’s many attractions.¹³⁹ The earliest years are more obscure, and it is likely that there was a gradual development from a relatively informal gathering of scholars to an increasingly independent institution. Fraser persuasively suggested that the

¹³⁶ De Vleeschauwer 1977: 187. ¹³⁷ Beaulieu 2006b: 28.

¹³⁸ Gottschalk 1972: 328–35; Fraser 1972 I: 305.

¹³⁹ For Zenodotos as the first Librarian, see Fraser 1972 I: 330–2.

intellectual circle established by Soter ‘resembled the similar groups which the tyrants and the kings of Macedon had established in the past’, and that a process of institutionalisation occurred under Philadelphus.¹⁴⁰ Indeed, in the surviving sources the earliest intellectual figures associated with Alexandria are linked directly to the royal family rather than to the Museum or Library: Philitas and Strato, for example, are attested as royal tutors (probably, as Fraser argued, before the establishment of the post of Librarian with which the former position later became associated).¹⁴¹ Even later on, the personal connection to the royal house remained prominent, with numerous anecdotes surviving about scholars’ interactions with Philadelphus and Euergetes.

We will explore these interactions and the evolution of Hellenistic personal patronage in [Chapter 5](#), but for the moment it is sufficient to note that ancient observers, particularly those writing during the Hellenistic period, did not detect any paradigm shift between earlier Greek or Macedonian royal patronage and the Museum. The descriptions aligning the Museum with the Peripatos begin later, with Strabo;¹⁴² the gap may be due to the loss of earlier evidence, but it is also plausible that it reflects the increasing visibility of these similarities as the institutional character of the Museum developed. Fraser remarked on the danger of retrojecting elements of the Roman-era Museum to the Hellenistic period;¹⁴³ the same danger applies to assuming that the characteristics of the developed Hellenistic institution were present or intended from its foundation. If the Museum’s institutional character was originally absent or less prominent, the break with Hellenic tradition is less stark; the personal patronage of kings and tyrants from the archaic period to the fourth century could well account for the Ptolemaic Museum with no need for inspiration from the East.

Even if the Greek and Macedonian precedents represent sufficient sources of inspiration, however, they need not be the only

¹⁴⁰ Fraser 1972 I: 307.

¹⁴¹ Fraser 1972 I: 309, 322. Philitas as tutor to Philadelphus: Suda s.v. Φιλήτας; Strato: Diog. Laert. 5.58 (who states that Strato received eighty talents for his trouble); *Vita Stratonis* (Westermann 1845: 440).

¹⁴² Strab. 17.1.8. ¹⁴³ Fraser 1972 I: 315.

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ones. The Library and Museum at Alexandria do resemble the libraries and scholarly communities of the Neo-Assyrian court and Esagila insofar as state support was a prominent aspect of their existence. The situation of scholars at the Neo-Assyrian court in Nineveh presents a less institutionalised scenario, perhaps most comparable with the situation of the earliest intellectuals who came to Alexandria at the Ptolemies' behest. Correspondence between cuneiform scholars and the kings Esarhaddon and Aššurbanipal reveals a system of personal patronage in which a scholar's position at court depended directly on royal favour, which could be revoked at any time.¹⁴⁴ For the Museum in its established form, Esagila is a stronger parallel. As Beaulieu observes, both were corporate organisations ultimately financed by the king, but administered as autonomous entities with control of their own funds.¹⁴⁵ We know little about the relationships between Neo-Babylonian and Achaemenid kings and temple scholars, but in the late fourth century Esagila was essentially a self-governing institution, which received royal subventions but was run by the *šatammu* (chief administrator) and *kiništu* (temple assembly).¹⁴⁶

Both Assyrian and Babylonian comparanda, therefore, present some similarities with the Alexandrian Museum in terms of the connections between the scholarly community and the central political power. However, there are differences in the precise nature of these connections which are arguably more significant. At Nineveh the function of the court scholars was to aid the king directly in his decision-making and protect him from harm, through their interpretations of ominous phenomena which were believed to signal future events, and their knowledge of the ritual means by which to avert or mitigate any portended disaster.¹⁴⁷ The exchanges between rulers and scholars documented in the correspondence are directed towards this aim, with scholars

¹⁴⁴ See e.g. Radner 2011: 363–5; Robson 2013: chs. 2–3. On patronage in the Near East more generally, see Westbrook 2005.

¹⁴⁵ Beaulieu 2006b: 28.

¹⁴⁶ On temple administration and autonomy in the Late Achaemenid and Hellenistic periods, see Clancier 2009b: 275–7 (Esagila); Clancier 2011: 756–62 (Uruk); Clancier and Monerie 2015.

¹⁴⁷ Parpola 1993b: xvii–xxiv; Radner 2011.

consulted on topics ranging from the most auspicious day for the crown prince to visit his father to the performance of the substitute king ritual.¹⁴⁸ The kings Esarhaddon and Aššurbanipal participated directly in the hermeneutic exercise. In the letters they are found discussing particular texts, asking for clarification and questioning scholars' interpretations; Aššurbanipal apparently built up a personal tablet collection to aid this process.¹⁴⁹ As Steven Shubert has pointed out, this is very different from the situation at Alexandria.¹⁵⁰ The scholarship supported by the Museum and Library was not directed towards assisting the Ptolemies with political decision-making, and there is no evidence that the kings participated directly in its scholarship. There was a clear political dimension to the Ptolemies' cultural and intellectual enterprise, as we have seen, but the politicisation of intellectual activity at Alexandria is qualitatively different from the advisory and protective functions of Neo-Assyrian court scholarship.

The similarity between fourth-century Esagila and the Museum in terms of political context also breaks down under closer scrutiny. After the Persian conquest, the Babylonian scholars' role as royal advisors seems to have been diminished, if not completely abandoned. Traditional scholarly disciplines continued to be pursued in the temples, which retained considerable autonomy and power locally well into the Seleucid period, but this intellectual activity now centred on the needs of local and regional cult.¹⁵¹ Foreign rulers' support (or lack of interference) indirectly supported their scholarship, but although this was a political act with regard to establishing good relations with the Babylonian elite, it is very different from the politics of Ptolemaic investment in the Museum and Library, where scholars' endeavours, and indeed mere presence, were intended to enhance the rulers' prestige on an international stage.

¹⁴⁸ Visits of the crown prince: *SAA* 10, nos. 48 and 52; substitute king ritual: *SAA* 10, nos. 1–4, 11–12, 90, 189, 219–21, 350–2, 377. On the substitute king ritual see page 42, and pages 229–31.

¹⁴⁹ Lieberman 1990; cf. Frahm 2011a: 523 on Mesopotamian rulers' personal tablet collections.

¹⁵⁰ Shubert 1993: 152.

¹⁵¹ The composition of Late Babylonian temple libraries confirms a focus on cultic activities and auxiliary disciplines: see pages 191–2.

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Although Beaulieu and De Vleeschauwer stress that they are positing only an institutional, not an ‘intellectual’ similarity, in practice one cannot compare the relationship between kings and intellectual institutions without examining aspects beyond the fiscal and administrative. Once this is done, the parallel between the Museum and scholarship at the Neo-Assyrian court or Esagila in terms of state involvement is simply that there *was* state involvement. This basic similarity is overshadowed in each case by the disparities in the precise relationships between the rulers and these institutions.

4.3.4.2 *The Religious Dimension*

Both palace and temple scholarship in Mesopotamia had a strong religious component. Scholars associated with the court or serving as prebend-holders in the temples acted as interpreters and appeasers of the gods, drawing on libraries which contained large numbers of prognostic and ritual tablets. Here Beaulieu sees another similarity between Esagila and the Museum. Noting the latter’s religious character as a sanctuary dedicated to the Muses, ‘inspiratrices du savoir et de l’art’, he draws an analogy with Esagila, where ‘les savants et les lettrés tenaient leur inspiration et leur savoir des dieux comme Ea et Marduk, détenteurs de la sagesse primordiale’.¹⁵² Once again, on the surface the similarity appears compelling. Ea, the Mesopotamian god of wisdom, held a role somewhat analogous to the Muses, as a channel through which humans received divinely inspired knowledge, and temple scholars no doubt drew inspiration from their physical and professional proximity to the divine.¹⁵³ But here too the parallel is deceptive. The idea of ‘inspiration’ masks the different relationships of the scholars in each context to the divine actors and the religious sphere in general.

¹⁵² Beaulieu 2006b: 29.

¹⁵³ Ea as god of wisdom and scholarship: Ebeling 1938: 376; Lenzi 2008b: 104–21; Galter 2015. The situation is not quite analogous; while the Muses were still portrayed as direct sources of inspiration long after Greek literary composition became a predominantly textual enterprise, first millennium scholars in Mesopotamia seem to have viewed the revelation of scholarly knowledge by Ea and other gods to the sages, *apkallū*, as a primordial stage in intellectual history, after which this knowledge was passed down by normal scribal transmission. See further Lenzi 2008b: ch. 2.

While the Museum did have a religious aspect, and its members probably participated in cultic activities, they were not themselves professional priests, and their intellectual activities were ‘secular’ in the sense that they did not answer directly to cultic aims. Conversely, many scholars associated with Esagila and the other Babylonian temples *were* priests (as were the Neo-Assyrian court scholars, who often held positions in the temples).¹⁵⁴ The individuals who wrote and owned most of our surviving scholarly tablets from Hellenistic Babylonia, including many of the celestial specialists we met in [Chapter 2](#), were *āšipus* (‘incantation priests’) or *kalûs* (‘lamentation priests’). Bound tightly into the ritual and economic hierarchies of the temple, these individuals were the main cultic specialists in first-millennium Babylonia. Their cultic obligations included the performance of particular rituals, for which they received shares of temple offerings as remuneration; the *āšipus* specialised in purification and healing and the *kalûs* in lamentations and calendrical rituals, although there seems to have been a certain amount of overlap between their repertoires.¹⁵⁵ Yet they were also scholars who copied, studied and authored compositions in Akkadian and Sumerian. Much of this intellectual activity centred on their priestly role, involving the copying and study of ritual and prognostic texts.¹⁵⁶ Of course, as Francesca Rochberg notes, the fact that the temple was the primary locus of cuneiform scholarship does not mean that *all* scholarly activity had a cultic application.¹⁵⁷ Literary and historiographical texts were also copied and composed by temple-based scholars, and many of these texts display concerns well beyond the narrowly cultic.¹⁵⁸ But in contradistinction to

¹⁵⁴ On the definition of ‘priest’ in Babylonia, see Waerzeggers 2010: 34–8; 2011. Waerzeggers stresses participation in the prebend system and conformity to purity restrictions over the primarily performative and theological connotations of ‘priest’ today. On the social geography of Assyrian court scholarship, see Robson *in press*: chs. 3–4.

¹⁵⁵ On the roles of the *āšipu* and the *kalû* and their specialist corpora in the first millennium BC, see for the *āšipu* Scurlock 2000; Jean 2006; Clancier 2009a; Clancier 2014a; for the *kalû* Shehata 2013; Gabbay 2014a (Assyria); Gabbay 2014b (focusing on the Emesal prayers which formed part of the *kalûs*’ remit, but with chapters on the duties and identity of the *kalû*); Gabbay 2015 (edition of the Eršema prayers, a subset of the broader corpus of Emesal prayers).

¹⁵⁶ See further pages 321–4. ¹⁵⁷ Rochberg 2000: 372.

¹⁵⁸ For a case study of one such text, see pages 349–69.

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Alexandrian scholars like Eratosthenes or Aristarchus, Babylonian temple scholars were actively involved in religious practice.

Overall, therefore, the religious dimension to Babylonian temple scholarship (or Assyrian royal scholarship) is not comparable to that of the Alexandrian Museum. The relationship between cultic and intellectual activity in the Athenian Academy and Lyceum, particularly the latter, provides a much more apposite comparison for Alexandria. On the basis of the available evidence, in this case the addition of a second stream of influence from Mesopotamia is not only unnecessary, but unwarranted.

4.3.4.3 *Bibliographic Practices*

Moving away from the broader characteristics of the intellectual communities in Nineveh, Babylon and Alexandria, we now turn to libraries in the narrower sense of text collections. Wendel and De Vleeschauwer both detected parallels between elements of bibliographic practice at Nineveh and Alexandria, and argued that since these elements are not known to have been used in pre-Hellenistic Greek libraries, their use at Alexandria must represent a Near Eastern inheritance.¹⁵⁹ Shubert has rightly questioned this idea, but as we will see, his counterargument that the ‘significant bibliographical methodologies used at Nineveh . . . are not applicable to the Alexandrian environment’ is not entirely accurate either.¹⁶⁰

To begin with bibliographic elements external to the text – catalogues, finding aids and other records associated with the organisation of collections – it should first be noted that we know almost nothing about cataloguing practices at Alexandria. If we are to trust Galen about works being labelled according to provenance and/or the corrector or editor of the copy, then some bibliographic information was certainly available, but we do not know how this related to the organisation of the collection as a whole, or to such inventories or finding aids as may have existed.¹⁶¹ As Fraser emphasised, Callimachus’ *Pinakes* were not, as sometimes claimed, a catalogue of the Alexandrian Library’s holdings, but rather an independent

¹⁵⁹ De Vleeschauwer 1977: 192–5; cf. Wendel 1949: 24–75.

¹⁶⁰ Shubert 1993: 153.

¹⁶¹ Galen *Hipp. Epid.* 3.606–7.

work of scholarship.¹⁶² Nor, however, is the confidence of Fraser and others that Callimachus drew upon such a catalogue to create the *Pinakes* warranted;¹⁶³ as Barnes observes, the *Pinakes* need not reflect either an Alexandrian catalogue or the collection itself.¹⁶⁴ Callimachus' monumental work certainly reflected his knowledge of books in the Library,¹⁶⁵ but we cannot extrapolate anything (particularly from the meagre fragments of the *Pinakes* which survive) about the Library's scope or organisation, or the existence or arrangement of any catalogue(s).

Nevertheless, whatever cataloguing practices were in place at Alexandria, Mesopotamian influence here can on present evidence be ruled out, since no cuneiform 'library catalogues' in the sense of lists of an entire collection are securely attested.¹⁶⁶ From the Old Babylonian period onwards, tablets are found which list a number of Sumerian or Akkadian works by incipit, or enumerate the tablets within a single textual series, but their functions are debated. Some may have a pedagogical or other scholarly purpose; most are probably inventories or labels to aid archival retrieval; what they almost certainly are not are reference catalogues of a working library collection.¹⁶⁷ A number of lists of scholarly tablets were also found at Kuyunjik, but these are inventories or booty lists of tablets acquired from elsewhere rather than a library catalogue.¹⁶⁸

When it comes to text-internal bibliographic information, there are some suggestive cross-cultural parallels. Contrary to Shubert's statement, Hellenistic Greek papyri do exhibit some similarities with first-millennium scholarly cuneiform tablets, including those from

¹⁶² Fraser 1972 I: 453; cf. Pfeiffer 1968: 127–8 and Jensen 2009: 81, who regards the *Pinakes* as 'best understood as part of the general peripatetic attempt at registering the phenomena of the world'. On the *Pinakes*, see further Blum 1991: chs 4–6.

¹⁶³ Fraser 1972 I: 453; Blum 1991: 151; Bagnall 2002: 356 n.36.

¹⁶⁴ Barnes 2000: 69. ¹⁶⁵ Pfeiffer 1968: 128.

¹⁶⁶ Clancier 2010: 7; Robson 2013: 56 and n.76.

¹⁶⁷ The nature of the Sumerian literary catalogues of the early second millennium is still debated. Van Dijk (1972: n.3) argued that they were labels for archival purposes; Civil (1976: 145 n.36) proposed that certain catalogues contained lists of compositions in curricular sequence, a theory developed further by Tinney 1999; Delnero 2010 surveys previous literature, arguing that these and the rest are in fact inventories; Tinney 2011: 582–3 suggests both functions are in play.

¹⁶⁸ Parpola 1983a (who classifies them as accession or acquisition records); Clancier 2010: 7, n.12; Robson 2013.

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Nineveh. As was standard practice in copies of cuneiform scholarly texts, the Greek papyri include colophons or ‘end-titles’, although these are usually shorter and contain fewer elements than those found on cuneiform tablets.¹⁶⁹ They also parallel Mesopotamian practice in placing the title at the end rather than the beginning of the roll, in contrast to Egyptian papyri, which use the opposite order. Finally, the papyri use stichometrical figures and incipits, which recall the line counts and incipits utilised in cuneiform tablets.¹⁷⁰

The difficulty here is whether these similarities actually reflect Mesopotamian influence, and if so, when and how this occurred.¹⁷¹ We know little to nothing about bibliographic practices in earlier Greek libraries, but references to total line counts in Plato and the Athenian orators may imply that stichometry was already in use in Classical Athens.¹⁷² Any influence from Mesopotamia might therefore predate the Hellenistic period, as argued by Wendel; alternatively, this is a case of convergent, independent development.¹⁷³ On present data, the similarities in copying practices and textual organisation support a tentative meshing of Greek and Mesopotamian intellectual histories here, but there is insufficient evidence to make a definite case for Mesopotamian influence or for the Hellenistic period as the time when it occurred. In terms of bibliographic practice, the case for a direct connection between Alexandria and the libraries of Mesopotamia is weak.

4.3.4.4 *Scope and Purpose*

Finally we come to an element which has been contested for each of the libraries under discussion, but also posited as a similarity between them: the intended scope of the text collection. Although we have seen that the universalism of the Library of Alexandria is a construction of the Judaeo-

¹⁶⁹ Usually only author, work and book number (Turner 1971: 13–14); cuneiform colophons also give information about owner, scribe, and sometimes sources.

¹⁷⁰ Pfeiffer 1968: 126–7; Turner 1971: 13–14, 16; De Vleeschauwer 1977: 194.

¹⁷¹ Zuntz 1953: 193–5 regards the similarities as striking but possibly a case of similar trends leading to similar results, commenting (193) that Wendel’s parallels are less significant when one examines the individual exemplars from which he constructed his ideal type.

¹⁷² Ohly 1928: 92–4; Pfeiffer 1968: 127; Canevaro 2013, *passim* but esp. ch. 7.

¹⁷³ Wendel 1949: 77–94.

Christian writers, the scale of the Ptolemaic collection project and resulting library was clearly very extensive, unprecedented in the Greek world at least. Somewhat ironically, this has been used as an argument both for and against the possibility of Mesopotamian influence.

In the former camp, De Vleeschauwer believes that while Aristotle's collection was 'universal in character', only the large libraries of 'the Orient', in particular Aššurbanipal's attempt 'to gather the whole of oriental literature into his library', could have inspired Ptolemy to undertake such large-scale text collecting.¹⁷⁴ Robert Barnes is more cautious, claiming of the Alexandrian Library: 'With the possible exception of Ashurbanipal's palace library, it represents the first attempt known to us to collect one literary heritage (in its case the Greek) comprehensively, and even foreign literature in summary form.'¹⁷⁵ Meanwhile, Paul-Alain Beaulieu and Philippe Clancier find it likely that the library of Esagila was of a similar scope to Aššurbanipal's collection (which they regard as universal), raising the possibility of influence from Babylon.¹⁷⁶ On the opposite side of the debate, Lionel Casson contrasts the 'comprehensive' Library of Alexandria with all Near Eastern libraries, which he sees as 'of limited scope and purpose', while Mostafa El-Abbadi regards the global scope of the Alexandrian Library as a new departure compared to a previous regionalisation of knowledge.¹⁷⁷ As these quotations illustrate, proponents of both views utilise the concept of the universal or comprehensive library which, as we have seen, is not strictly applicable to Alexandria; it is also problematic for the Mesopotamian examples, as will become clear below. Nevertheless, the basic comparison between large-scale text collecting projects of wide-

¹⁷⁴ De Vleeschauwer 1977: 182–3. Similarly, Beaulieu (Beaulieu 2006b: n. 39) sees Aššurbanipal as the culmination of a Mesopotamian tradition 'de réunir en un seul lieu le savoir de toute une civilisation, sinon le savoir universel', although he leaves the cross-cultural link more implicit, merely pointing to the evidence of the Uruk tablets and Aššurbanipal letters that this tradition was still alive when the Alexandrian Library was founded.

¹⁷⁵ Barnes 2000: 76. ¹⁷⁶ Beaulieu 2006b: 28, n.39; cf. Clancier 2010: 8–9, 21–2.

¹⁷⁷ El-Abbadi 1990: 8; 2004: 167.

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ranging scope is potentially valid; it is this slightly softer version of the claim that will be tested here.

Steven Shubert, the only scholar to make a systematic comparison between the libraries of Nineveh and Alexandria, concluded that ‘the Alexandrian situation is not too different’: neither library was intended to be truly universal, and although the libraries of Nineveh were dominated by omen texts, Aššurbanipal collected ‘a little of everything’.¹⁷⁸ Broadly speaking, this is true, but it masks an important difference between the aims of the Neo-Assyrian and Ptolemaic rulers. As Shubert acknowledges, the vast majority of the Nineveh tablets contain omens, incantations or rituals; there are few literary and lexical texts, and no mathematics or observational astronomy.¹⁷⁹ The libraries of Nineveh were professional collections designed to serve the court scholars (and the ruler who ultimately made decisions) in their ongoing quest to keep king and country safe. Texts of all kinds may indeed have ended up in the collections, particularly in the final phase of tablet acquisition when Aššurbanipal confiscated large numbers of tablets from Babylonia.¹⁸⁰ There must also have been an element of cultural imperialism in such acquisitions from the land to the south which had always had the lead in cultural and intellectual terms. But the evidence from Nineveh suggests that the main aim was to collect the sort of compositions necessary to mediate the relationship between king and gods, not to create a comprehensive repository of Akkadian literature to display the cultural cachet of the Neo-Assyrian kings.

Despite some modern claims to the contrary, this picture is reinforced rather than contradicted by the Late Babylonian letters between Aššurbanipal and the scholars of Babylon and Borsippa. Ronnie Goldstein, highlighting the phrases ‘all scribal learning’ and ‘the entire corpus of learning’ which appear in both letters, suggested that they represent Aššurbanipal’s library as universal; for him, this is a deliberate Hellenistic magnification, designed to trump Alexandria with an earlier Mesopotamian universal

¹⁷⁸ Shubert 1993: 161.

¹⁷⁹ Shubert 1993: 150–1; Fincke 2003: 129–35; Frahm 2004: 48; Potts 2000: 23–4; Robson *in press*: ch. 3.

¹⁸⁰ Robson *in press*: ch. 3.

library.¹⁸¹ Yet when taken in context these phrases do not really look like statements about comprehensive acquisition. In their letter to Aššurbanipal, the Borsippans recall that the king has ordered them to ‘write out and send me all the scribal learning *which is in the possession of (the god) Nabû*’ (my italics), i.e. in the Ezida temple in Borsippa.¹⁸² Similarly, in the letter between Aššurbanipal and the scholars of Babylon the expansive phrase ‘all the scribal learning, the whole of the wisdom of (the gods) Ea and Asalluḫi’ is followed by a list of specific cuneiform compositions and corpora, which ends with ‘all the scribal [learning, as much as there is, *that is in the*] *possession of the great lord Marduk*’, i.e. the temple of Esagila in Babylon.¹⁸³ While a request for copies of all texts from a city’s main temple certainly represents large-scale acquisition, this is not the expression of a desire for comprehensiveness. In fact, the opposite is the case: both Aššurbanipal letters mention particular texts or text series as desiderata, as does the copied letter order from the unidentified king.¹⁸⁴ If anything, the true parallel with Alexandria is selectivity; the theme of the search for particular texts is reminiscent of the anecdotes regarding Ptolemy II and the Athenian tragedians, or the books of Theophrastus. But this parallel is too general to bear the

¹⁸¹ Goldstein 2010: 200, 203. I regard as plausible Goldstein’s more general suggestion that these letters were reworked or created in the Hellenistic period to recall the Babylonian cultural heritage, make a status claim for the scholars of Babylon and Borsippa and/or assert Babylonian priority in the intellectual sphere. Only the posited link to the Library of Alexandria seems to me unconvincing. The use of the number 72 in the context of copying out canonical texts in both BM 28825 and the *Letter of Aristeas* (72 writing boards in the former; 72 Jewish scholars assigned to translate the Septuagint in the latter) stressed by Goldstein (2010: 204) is intriguing, but the contexts are not exactly parallel and it seems more likely that the similarity is coincidental.

¹⁸² BM 45642 obv. 9 (following Frame and George 2005): *kullat ʔupšarrūtu š[a libb]i makkūr Nabû bēliya šuṭurā šūbilāni*.

¹⁸³ BM 28825 obv. 8–10: *kullat ʔupšarrūtu gabbi nēmeqi Ea u Asall[uḫi ... šumma iz]bu ālu ina mēlê šakin āšipūtu kalūtu nārūtu u kullat ʔupšarrūtu mala bašū ša libbi makk[ūr Marduk bēli rabi bēliya*. In BM 28825 obv. 15, the property of Marduk is mentioned again in connection with ‘all the houses in’ (or ‘the houses of all the ...’). This may indicate that tablets were also requested from houses, but does not negate the point about universality. The phrase ‘all the scribal learning’ occurs once more at rev. 30, but the context is too broken to establish the force of the original sentence.

¹⁸⁴ BM 28825 obv. 9–10; BM 45642: obv. 12–13; CT 22, 1: 10–27 (Frame and George 2005: 267–9, 272–5, 280–1). As each letter focuses on the collection of a particular temple, one might also suspect the efforts of a Late Babylonian scribe to promote the history of the institution in which he worked (cf. Goldstein 2010: 207).

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weight of a direct connection; the acquisition of rare commodities of all kinds, including texts, has been characteristic of imperialism in many historical settings.

As for the ‘library of Esagila’, it is hazardous to hypothesise about the characteristics of Esagila’s collections of scholarly tablets when we cannot reconstruct these collections with any degree of certainty. It is very unlikely, however, that the holdings of Marduk’s temple were ‘encyclopaedic’ in the usual sense of the word, or directly analogous to the royal libraries of Nineveh.¹⁸⁵ Since information on the provenance of many of the Late Babylonian scholarly tablets from Babylon is lacking, it is tempting to conceptualise all this material as a whole, which may then seem ‘comprehensive’ in its coverage of Sumero-Akkadian scholarly tradition. However, this compresses several centuries’ worth of material into a single mass. Furthermore, it is necessary to recall that even the tablets associated with Esagila from a single time period, like those from Nineveh, come from many smaller individual collections, stored in different places in the sanctuary and the storerooms and houses of its personnel.

Moreover, to judge by both the material from Babylon and the tablets recovered from other Late Babylonian temples, it is likely that the collections of Esagila focused primarily on the needs of the religious community it served. Like the scholars at the Neo-Assyrian court, those of the Babylonian temples in the late first millennium were concerned with managing the relationship between the human and divine worlds. This relationship was negotiated differently after the end of native rule, since temple scholarship no longer revolved around king and court; the change is reflected in differences in the composition of temple libraries which further confirm the idea that these were specialised collections. Eleanor Robson has shown that in the Neo-Assyrian temples

¹⁸⁵ Clancier (2010: 9) defines ‘encyclopaedic’ as ‘grouping together all the canonical cuneiform works and series’. If this refers to the major omen series, then both temple and palace libraries would fit the description since they did include these series (though not always complete). However, this is not what is generally understood by the term ‘encyclopaedic’, which implies universality and comprehensiveness. For the idea that Esagila was analogous to the Neo-Assyrian libraries, see Beaulieu 2006b: 28, n.39; Clancier 2010: 8–9, 21–2 (Clancier separates ‘palace’ and ‘temple’ libraries typologically, but suggests that Esagila fulfilled the function of a royal library).

at Nineveh and Kalhu, which served court scholarship, the best represented genres are omens and incantations designed to safeguard the king, while at the Rēš temple in Hellenistic Uruk there is an emphasis on astronomy and temple rituals, which were closely linked to the temple scholars' need to predict and ritually neutralise the effects of ominous phenomena.¹⁸⁶ The extremely large number of Hellenistic astronomical tablets found at Babylon suggests a similar disciplinary emphasis among scholars associated with the Esagila temple. Of course, at both Uruk and Babylon texts of other genres were also discovered, but overall, it seems that the Babylonian temples did not have 'comprehensive' reference libraries of Sumero-Akkadian scholarship; rather, their tablet collections catered closely to the needs of their various scholarly personnel and were adapted to their evolving scholarly roles.

Even if, in reality, Babylonian temple collections were not universal in any meaningful sense, is it possible that they were presented as such? Given that no Macedonians or Greeks would have been able to explore the temple's collections for themselves, it would have been the stories told about them which mattered; might Babylonian informants have seen fit to create an image of an encyclopaedic Esagila library for their new conquerors? We have seen that the Late Babylonian versions of the letters between Aššurbanipal and the Borsippans do not in fact present such an image when examined closely. Nor does the other source which might be read, at a stretch, in this way: Berossus' statement that 'records of many things' (*anagraphas de pollōn*) covering a period of 150,000 years had been preserved 'with great care in Babylon'.¹⁸⁷ While 'Babylon' here might just about be taken to refer to Esagila's collections, the context of the passage makes clear that this is not a claim to the entire cuneiform scholarly tradition: Berossus goes on to specify that the *anagraphai* in question dealt with particular topics: 'the heavens, the sea, the earliest generations and the kings and the deeds of their reigns'. The emphasis is on the careful preservation of records of Babylonia's earliest history: what is at stake here is Babylon's antiquity and status as a repository of privileged and reliable

¹⁸⁶ Robson 2013. ¹⁸⁷ *FGrHist/BNJ* 680 Fr. 1b (1).

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knowledge. The rhetoric of comprehensiveness or universalism is absent: the collection is large, ancient and contains very important texts, but there is no implication that it contains (or ever aimed to contain) everything.

Overall, there are some similarities in scope and purpose between the Library of Alexandria and its posited Mesopotamian sources of inspiration. The collections amassed by Aššurbanipal in Nineveh and the Ptolemaic Library of Alexandria are comparable in terms of the large-scale acquisition and editing of texts (including an element of force or coercion), which in both cases also represented a transfer of intellectual and cultural hegemony from one major centre (Babylon/Athens) to another (Nineveh/Alexandria). Yet these are banal similarities, characteristics of various imperial regimes throughout history, and it is difficult to see them as evidence for real influence rather than parallel outcomes to parallel configurations of political and cultural power.

In Babylonia, although a lack of evidence must curtail any discussion about the scale and scope of Esagila's collections, this sanctuary and other temples of southern Mesopotamia eventually became the last guardians of cuneiform scholarship, and to this extent we may agree with Clancier that, as at Alexandria, the preservation of their cultural heritage was one of their functions.¹⁸⁸ Indeed, something of this sense of the custodianship of an entire culture and its history may be read into Berossus' statement about the care with which the ancient records he describes had been preserved in Babylon.¹⁸⁹ This does not mean, however, that these institutions or their personnel or founders ever made a systematic attempt to collect and synthesise all of that heritage. These were religious communities, where scholars worked for the most part with tablets closely related to their duties within the temple. This is a long way from the Museum of Alexandria, whose scholars competed for sheer erudition and pushed the boundaries of knowledge in all spheres, or the Library which was designed to showcase the best of Greek scholarship in every genre.

Initially, the library seemed a promising means of tracing connections between the intellectual histories of Hellenistic Greece

¹⁸⁸ Clancier 2010: 21. ¹⁸⁹ *FGrHist/BNJ* 680 F1b (1).

and Mesopotamia. Unfortunately, the various connections examined here dissolve under closer investigation. On present evidence, the Hellenistic royal libraries were not great catalysts for the meeting of Greek and Mesopotamian intellectual traditions. A few hints in our sources suggest that Pergamon may have been somewhat more receptive to eastern knowledge than Alexandria, but both were ultimately centres of Greek scholarship, decisively and self-consciously so. While the books and scholars collected by the Ptolemies ranged widely across the Hellenic world, they did not represent all the intellectual traditions of the *Hellenistic* world. The translation of foreign works and the aim of universal acquisition are tropes of the Jewish and Christian texts, whose authors had a vested interest in linking the translation of the Hebrew Bible to the highest level of human authority, and to what quickly became the most famous intellectual institution of the ancient world. In the Classical sources, the Alexandrian Library is the cultural and intellectual equivalent of the Pharos: a beacon of Graeco-Macedonian power.

It is within Greek and Macedonian contexts and traditions, too, that the antecedents and inspirations of the Library, and the Museum whose members used its collections, can be most securely situated historically. There are clear links with the Peripatos and the long-standing traditions of royal or tyrannical patronage in Greece and Macedon, and there is very little evidence for Mesopotamian influence. Some of the suggested similarities between Alexandria and the scholars and libraries of Nineveh and Esagila turn out to be deceptive, such as the religious dimension to scholarship, or insufficient to posit a direct connection, like the parallels in bibliographic praxis. Others are genuine but superficial, overshadowed by greater disparities. Although the scholars and libraries in Ptolemaic Alexandria, the Neo-Assyrian court and Esagila received state support, the relationship between scholarship and politics was very different in each case. So too, while both Aššurbanipal and the Ptolemies had political reasons to invest in large-scale text acquisition, the precise scope and aims of each collection are not comparable, and the broad similarities between them are more securely attributed to transhistorical characteristics of imperialism than to linear influence. This is particularly so

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when the posited mechanism for influence is itself a fragile historical reconstruction. Against the attractive image of the future Ptolemy I touring the tablet rooms of Esagila in amazement, or hearing of Aššurbanipal's huge library from the Chaldaean scholars, we must set the silence of the Greek and Roman authors, and the exclusive nature of cuneiform scholarly libraries and the communities which used them. Given the limitations of the sources, it would be rash to rule out the possibility of a cross-cultural connection altogether. New discoveries may reveal the Library of Alexandria (or that of Pergamon) as a key connecting link between Greek and Mesopotamian intellectual traditions and scholarly practices in the Hellenistic period. On the basis of the sources currently available, however, there is insufficient evidence to support such a reconstruction. If we wish to connect the intellectual histories of the Hellenistic Greek world and Mesopotamia, we will have to go beyond the library.

KINGS AND SCHOLARS

As yet, our cross-cultural history of Hellenistic intellectual life consists mainly of fragmented vignettes concerning individual texts and scholars; it lacks context and coherence. The astral sciences, the work of Berossus and the *Graeco-Babyloniaca* offer clear evidence of contact between Hellenistic Greek and Mesopotamian scholarship, but little insight into the mechanisms by which it took place, or which institutions, if any, supported it. Connections between the royal libraries of the Hellenistic Greek world and the tablet collections of Mesopotamia's palaces and temples dissolve under sustained scrutiny. The reputation of the Library of Alexandria in later sources as a storehouse of the world's knowledge does not reflect the evidence from the Hellenistic period, which suggests that the Ptolemies and their scholars were concerned with Greek scholarship rather than alien wisdom. A similar picture emerges from Pergamon; the antiquarian and glossographical interests of certain scholars associated with Pergamon extended into the Near East, but there is little evidence that the royal library functioned as an important hub for cross-cultural scholarly exchange. Nor are there sufficient grounds to support the thesis that it was the immense tablet holdings of the Esagila temple in Babylon or the cultural memory of Aššurbanipal's tablet collecting in Nineveh which inspired the Ptolemies and their competitors to found institutions of learning and amass huge collections of texts.

The intellectual institutions founded by Hellenistic rulers were not, however, the only means by which kings invested in intellectual culture and interacted with scholars. The Hellenistic royal courts provided a variety of opportunities for experts to educate,

entertain or otherwise interact with the king, the royal family and high-ranking officials. These interactions offer another possible route for cross-cultural exchange, and they are the focus of the current chapter. The Macedonian kings have been identified as one of the binding elements which give unity to the Hellenistic world.¹ Can they also provide a means of linking its diverse intellectual cultures? Did Hellenistic rulers interact in similar ways with Greek and Babylonian scholars? Were their courts fertile centres for cross-cultural contact? Did royal patronage facilitate the transfer of knowledge, texts or scholarly practices between Babylonia and the Greek world?

This chapter argues that interactions between Hellenistic kings and scholars in Greece and Babylonia do indeed provide a means of linking intellectual life across the cultural divide. This is not, however, because the Macedonian kings promoted cross-cultural connections, or were themselves particularly interested in the intellectual traditions of the different cultures over which they ruled.² In fact, as we will see, the intensity and type of interactions that occurred between rulers and Greek and Babylonian scholars are on the surface completely dissimilar. Yet, comparing the ways in which kings interacted with these two intellectual traditions highlights deeper similarities, and also provides some context for the points of cross-cultural contact we have explored so far. Beyond this, considering the Greek and Babylonian cases in parallel also challenges some of our preconceptions about what is characteristically ‘Hellenistic’ about both kingship and intellectual life during the period.

¹ Ogden 2002: x; Errington 2008: 8–9; Lane Fox 2011: 4.

² For a different perspective, see Gruen 2017 (which appeared too late to be fully taken into account here). Gruen argues that the Hellenistic courts sponsored intellectual activity by both Greeks and non-Greeks that enhanced Greek knowledge of non-Greek peoples, their history and traditions, as part of an effort to gain greater understanding of the non-Hellenic lands and peoples now under the control of Greek conquerors and settlers. However, the only non-Greek scholars examined are Berossus and Manetho, whose connections to the Seleucid and Ptolemaic courts are questionable, as we saw in Chapter 3. Patronage of Greek intellectual production about non-Greek cultures is not in itself patronage of non-Greek intellectual cultures, and so in the current chapter Greek ethnographic works such as that of Megasthenes are classed as Greek scholarship, while kings’ engagement with Babylonian intellectual culture is assessed on the basis of their interactions with Babylonian intellectual specialists.

5.1 Conger Eels and Cuneiform

We begin with two moments of contact between Hellenistic kings and scholars. The first, reported by Plutarch and Athenaeus, took place (if it is historical) in the mountains of central Greece, sometime in the 270s or 260s BC. The scene is the camp of the Macedonian king Antigonos II Gonatas. The fish-loving poet Antagoras of Rhodes, otherwise known to posterity as the author of a lost *Thebaid*, and at this point a guest at Antigonos' court, is boiling conger eels. Antigonos comes across him with his pot (and apron, in Athenaeus' version); displeased at finding his court poet engrossed in such a banausic task, he archly enquires, 'Do you think, Antagoras, that Homer wrote up the deeds of Agamemnon by cooking conger eels?' Antagoras, unfazed, retorts, 'Do *you* think that Agamemnon did those deeds by worrying about who in his camp was cooking conger eels?'³

The second interaction occurred around the same time, but on the other side of the Hellenistic world, in the Babylonian city of Borsippa. This time, a king was the one engaged in manual labour, although the context was far from banausic. In 268 BC, as members of the local priesthood looked on, the Seleucid king Antiochos I ritually relaid the foundations of Ezida, the temple of Nabû, Borsippa's patron deity and Mesopotamian god of writing and scholarship. This traditional ceremony and act of royal devotion, in which the king personally moulded the bricks using the finest oil, is described in an Akkadian inscription in Antiochos' name, written in cuneiform script on a clay cylinder buried in the newly restored foundations.⁴ The creation of the inscription, and the correct performance of the bricklaying ceremony, depended upon detailed knowledge of the scholarly cuneiform texts which made up the ancient intellectual heritage of Mesopotamia.

Both these anecdotes show us Hellenistic rulers interacting with scholars and intellectual traditions. Yet the form the interaction takes is very different. In the first case, king and poet engage in

³ Ath. 8.340f, cf. Plut. *Mor.* 182f. Athenaeus ascribes the anecdote to Hegesander of Delphi.

⁴ The 'Borsippa' or 'Antiochos Cylinder'. See pages 220–3 for discussion and bibliography.

5.2 Philosophers and *Philologoi*

repartee which showcases their social familiarity and establishes the ruler's personal investment in Greek intellectual culture. In the second example, the extent of Antiochus' engagement with the intellectual tradition behind his performance and its record is less clear. The inscription offers no indication of his relationship with the priests, and it is unclear how much he knew of the cultural and intellectual contexts for his actions. This transaction looks more pragmatic and political: Antiochus interacts with Mesopotamian scholarship to the extent that it serves to cast him in the correct cultural idiom in a particular local context. It is easy to read the Borsippa episode in instrumental terms, with cuneiform intellectual culture merely a tool to be manipulated for political gain.

These snapshots are taken from very different sources, which each present their own methodological challenges. The lateness of the sources and the neatness of the rhetoric cast a shadow over the historical validity of Antigonus and Antagoras' encounter over the eels, while the primary context and matter of fact descriptions of Antiochus' ritual bricklaying should not lull us into a false sense of security regarding its historical accuracy. Yet regardless of their truth-value and differences in subject matter, these anecdotes are useful starting points because they express in distilled form what appears to be a significant dichotomy between the ways in which Hellenistic kings approached Greek and Mesopotamian intellectual culture: on the Greek side intense and personal investment, like Antigonus and Antagoras; on the Babylonian, remote and pragmatic engagement, like Antiochus and the scholars of Borsippa. The current chapter explores and ultimately seeks to explode this dichotomy, suggesting that in structural terms Hellenistic rulers' relations with Greek and Babylonian scholarly specialists are comparable. We will first sketch the two extremes, before collapsing the space between them.

5.2 Philosophers and *Philologoi*: Greek Intellectuals and Hellenistic Kings

Hellenistic kings competed not only on the battlefield but also in the cultural sphere, vying to display their command of and respect

for Greek culture. The range of philhellenic activities in which rulers engaged included the funding of games or festivals, *asylia* grants to temples and communities, and the setting up or support of gymnasia and schools.⁵ But kings did not only fund Greek education for their subjects; they were keen to appropriate and display Greek learning, *paideia*, themselves. Hellenistic royal philhellenism is characterised by an active interest in the intellectual sphere. Here, as in other respects, the policies of different dynasties and individual rulers are not identical – an issue which we shall revisit later. Yet a plethora of sources enable us to link Greek intellectual figures to all the different Hellenistic courts.

A few words of caution are necessary regarding these sources. First, many are literary texts which aim to create a particular image of relationships between kings and scholars; as Richard Hunter points out, we know more about the literary representation of Hellenistic patronage of Greek poets and scholars than about its actual workings.⁶ Moreover, the state of the evidence for each individual relationship between king and scholar ranges from secure to desperate. It is crucial to remember that much of what we know, or think we know, about Hellenistic Greek intellectual culture comes to us through an anecdotal tradition dominated by the biographical works of Diogenes Laertius and Plutarch and the *Deipnosophistae* of Athenaeus, works which emphasise the exemplary or unusual and have a special interest in relationships between those with intellectual expertise and those who wield political power. These late sources provide us with some of the fullest evidence for Hellenistic kings' interest in Greek intellectual culture, but the stories they tell often have clear moralising overtones. Diogenes Laertius' *Lives* in particular contain numerous examples of Hellenistic philosophers of all schools refusing

⁵ Gymnasia and schools: Bringmann and von Steuben 1995, nos. 94 (Attalus II and Delphi), 106 (Philip V and Perseus, gymnasium at Larissa), 284 (Eumenes II, gymnasium at Miletus). Ptolemaic gymnasia did not usually receive royal funding, but perhaps enjoyed a reduced rate of oil tax (Paganini 2011: 103). Games and festivals: e.g. Austin 2006, no. 256 (Ptolemy II, the *Ptolemaieia*); *asylia*: Rigsby 1996. Fiscal advantages: in Ptolemaic Egypt, Greek teachers, athletic coaches, actors and victors in national games received exemption from the salt tax (Clarysse and Thompson 2006: 124–38; Thompson 2007: 128–31).

⁶ Hunter 2003b: 38.

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invitations to court, often with a witty or philosophically pointed response. For example, Antiochus II's best efforts fail to attract the Peripatetic Lyco to his court; Lacydes, head of the Academy in the mid-third century, turns down Attalus I with the quip that statues are best admired from a distance, while the Stoic Zeno of Citium refuses Antigonus Gonatas with equal firmness, pleading bodily infirmity and dispatching his pupils Persaeus of Citium and Philonides of Thebes instead.⁷ These narratives become easily explicable, but also historically suspect, once we take into account the fact that in later biographical and philosophical tradition, the refusal of a powerful patron became an attribute of the wise philosopher.⁸ Nor are the contemporary sources always more transparent. Reflections of royal patronage in the works of the Hellenistic poets are sometimes allusive in the extreme, and here too it is important to take into account the constraints of genre and the effects of imagination; poets and other writers might play with and subvert existing models of patronage.

Royal interest in Greek intellectual culture is not, however, simply part of a later moralising discourse on philosophers and power, or an imagined world created by Hellenistic literati. Narratives about Hellenistic kings 'sending for' (usually *metapempein*) Greek intellectual figures crop up in a variety of sources from the Hellenistic period to late antiquity (and beyond), while a wide range of other references also place poets, scientists and philosophers at the Hellenistic courts. Much could be (and has been) said about this material and its representation of royal-scholarly relationships. Here, I wish simply to highlight three recurring characteristics of kings' approaches to Greek intellectual culture in the surviving sources, all illustrated *in nuce* in the anecdote about Antigonus and Antagoras with which we began.

5.2.1 *Scholars, Scholars, Everywhere*

The first is the apparently ubiquitous presence of Greek intellectual figures at the Hellenistic courts, and kings' active efforts to

⁷ Diog. Laert. 5.67 (Lyco); 4.61 (Lacydes).

⁸ Hunter 2003b: 24–9, with Hardie 1983: 30–6; Strootman 2007: 217.

attract and retain them. Antagoras' position in the entourage of Antigonos is paradigmatic of a pattern which repeats itself across the Hellenistic world. A few examples from each dynasty will serve to illustrate its pervasiveness.

As part of their efforts to assume the role of cultural and intellectual hegemon for the newly expanded Hellenic world, the Ptolemies set the trend early with the acquisition of Greek scholars and books.⁹ After the establishment of the Museum and Library, as we have seen, poets and scholars are increasingly linked with these institutions rather than the Ptolemaic court, but various sources attest to the kings' continued interest in and interactions with specific intellectual figures. The later biographical tradition claims intense Ptolemaic interest in philosophers, many of whom of course refuse their invitation to court: Theophrastus, Cleanthes, Chrysippus and Stilpo are all depicted resisting Ptolemaic royal overtures.¹⁰ In this case the persistent recusatio may be more than a literary trope: Fraser suggests a genuine reluctance of philosophers to visit the Ptolemaic court.¹¹ Yet not all Ptolemaic invitations fell on unreceptive ears: the polymath Eratosthenes, who according to the *Suda* was sent for from Athens by Euergetes,¹² was one of the stars of Alexandrian scholarship, while Athenaeus states that the Stoic Sphaerus of Borysthenes was sent for on his own account by Ptolemy IV, rather than acting as Cleanthes' substitute as in Diogenes' version.¹³

Contemporary sources too allude to Ptolemaic patronage of individuals. Although, as Hunter emphasises, there is no evidence from Theocritus' poems for a direct patronage relationship between him and Philadelphus,¹⁴ the explicit royal encomium in Theocritus 17 reflects a world in which such a relationship was possible. The same goes for the praise of Ptolemy I and II couched in prophecy in Callimachus' *Hymn to Delos*, and the subtler reflections of Ptolemaic court circles which suffuse these poets'

⁹ On Ptolemaic aspirations to cultural hegemony, see e.g. Erskine 1995: 45–7.

¹⁰ Diog. Laert. 5.37; 7.185; 2.115. ¹¹ Fraser 1972 I: 484.

¹² *Suda* s.v. Ἐρατοσθένης; cf. Strabo's more indirect remark that he was 'honoured by' the Ptolemies (Strabo 17.3.22).

¹³ Ath. 8.354c. ¹⁴ Hunter 2003b: 27–9.

other works and the poems of Posidippus.¹⁵ We may also note the presence of ‘not a few’ *philosophoi* at the royal symposium described in the *Letter of Aristaeas*, which, although problematic in many ways, at least presents an image of the intellectual milieu at the Ptolemaic court considered plausible in later Hellenistic Alexandria.¹⁶

A close second in their patronage of Greek intellectual culture were the Attalids, despite their later entry into the dynastic arena. In addition to the moralising narratives of demurring philosophers, other less pointed notices in Diogenes Laertius and earlier writers link Pergamene rulers to specific intellectual figures and create a strong impression of royal interest in Greek intellectual culture.¹⁷ A number of individuals are said to have spent time at the Attalid court, of whom the most influential was the Stoic Crates of Mallos during the reigns of Eumenes II and Attalus II.¹⁸ Pliny also places at the court of Attalus or Eumenes the sculptor Antigonos of Carystus, who ‘wrote books about his art’ (*volumina condidit de sua arte*); this Antigonos is probably to be identified with one or more of the homonymous biographer, paradoxographer and/or poet who appear in other sources.¹⁹

The relationship between Pergamon and Alexandria brings out the competitive dimension to Hellenistic intellectual patronage.²⁰ Even if Pfeiffer’s comment that the Attalids did not intend to create a rival ‘school’ to that of Alexandria is probably correct, it is clear that the two dynasties were rivals not only in the competitive collection of texts, but also in their efforts to attract or cultivate high-profile intellectual figures.²¹ The story of Aristophanes of Byzantium being imprisoned by Ptolemy V to

¹⁵ See e.g. Fantuzzi and Hunter 2004: ch. 8; Murray 2008, and for Posidippus also the collected papers in Gutzwiller 2005; Petrovic 2014.

¹⁶ *Ar.* 200. On this text, see pages 147–50. ¹⁷ Cf. Hansen 1971: 397–433.

¹⁸ Plin. *HN* 7.13, 28, 31; Ael. *NA* 17.9.31; Suet. *Gramm.* 2 (with erroneous dating of Attalus II; cf. Pfeiffer 1968: 235 n.2).

¹⁹ Plin. *HN* 34.84. Dorandi 1999 distinguishes 1) a third-century biographer/sculptor, and 2) a first-century poet (rejecting the paradoxographical work). Only Pliny’s testimony links Antigonos directly to Pergamon, but the latter’s biographies of Stoic philosophers imply his presence there.

²⁰ See also Strootman 2007: 210–13. ²¹ Pfeiffer 1968: 235.

prevent him fleeing to Eumenes II is only attested in the *Suda* and perhaps suspect in its dramatic detail, but the general tenor is supported by more indirect indications of competition in Diogenes' *Lives*, where a brief comparison is sometimes made of an individual's relationships with rulers of different dynasties.²² Interestingly, on several occasions the Attalids emerge ahead. For example, before relating Antiochus' failure to attract Lyco to the Seleucid court, Diogenes observes that the Peripatetic was highly valued by Eumenes I and Attalus I, who 'supplied him with many things'.²³ Similarly, Arcesilaus' reluctance to leave Athens to meet with Antigonos is contrasted with his good relationship with Eumenes I, 'the only one of the kings whom he addressed'.²⁴

The cases of Lyco and Arcesilaus also provide a reminder that kings made approaches to Greek intellectuals at home as well as seeking to entice them abroad.²⁵ Royal investment in philosophers or their institutions was part of a range of benefactions and dedications by which the Attalids displayed their cultural credentials on the international stage, and particularly in the panhellenic centres of the old Greek world. Personal support of intellectual figures like Lyco and Arcesilaus was one component of a sustained programme of Attalid cultural patronage at Athens which included a garden at the Academy and the Stoas of Eumenes I and Attalus II in the agora, which monumentalised Attalid cultural claims at the heart of the city.²⁶

Evidence for Antigonid and Seleucid patronage of intellectuals is less abundant than for the other two dynasties, but significant nonetheless. In Macedon, several intellectual figures are connected with the early kings and their courts: Diodorus describes the utopian writer Euhemerus and the historian Hieronymus of Cardia as *philoi* of both Cassander and Antigonos Monophthalmos, while the Peripatetic philosopher Prytanis of Carystus is linked by Polybius

²² Pfeiffer 1968: 172. ²³ Diog. Laert. 5.67. ²⁴ Diog. Laert. 4.38.

²⁵ In Lyco's case the wording leaves it unclear whether he spent time at the Attalid court, but with Arcesilaus the implication seems to be that Eumenes I supported him in Athens.

²⁶ For the Attalids and Athens, see Habicht 1990, who suggests (575) that contacts between Pergamene dynasts and leaders of the Academy and Peripatos actually led to the establishment of diplomatic relations with the Athenian state. On Attalid *Kulturpolitik*, see Gruen 2000.

with Antigonus Doson (r. 229–221 BC).²⁷ But it was during the reign of Antigonus II Gonatas (276–239 BC) that intellectual life at Pella most closely approximated Alexandria, as the Antigonid court played host to several poets and philosophers. The most famous figure is the poet Aratus of Soli, who is placed at Gonatas' court by Pausanias and the *Lives of Aratus*, a series of late biographies by anonymous writers.²⁸ Although Hunter rightly cautions that the *Lives* offer versions of how the relationship between patron and poet could be represented, and 'their common basis is not to be read as the best approximation to "what really happened"', it does not seem overly credulous to trust them on the *existence* of certain poet-patron relationships.²⁹ The *Lives* also place several of Aratus' contemporaries in Gonatas' circle: Antagoras of Rhodes and Persaeus of Citium, whom we have already encountered, and the poet and grammarian Alexander of Aetolia.³⁰

With the Seleucids, the pattern of evidence is similar. The earliest cases of possible patronage are ambiguous: Megasthenes and Patrocles, who wrote on India and the Caspian Sea respectively, were agents of Seleucus I and their writings reflected their political assignments; it is doubtful to what extent the ethnographic or historiographic results of their missions were intended by their royal commissioners.³¹ Later examples offer

²⁷ Diod. Sic. 6.1.4, 18.50.4; Polyb. 5.93.8. On Hieronymus, see further pages 240–1. For the (minimal) evidence for philosophers and artists at Doson's court, see Le Bohec 1993: 234–5.

²⁸ The *Lives* have traditionally been viewed with suspicion by modern scholars, largely due to a serious error concerning their dating of Nicander of Colophon (thus, for example, Pfeiffer 1968: 121 n.4: 'these confused and corrupted texts'). However, Cameron (1995: 189–214) presented compelling arguments for at least partial rehabilitation, explaining the chronological problem as the product of misinterpretation by later commentators, and highlighting other evidence for their accuracy. If, as he suggests, the *Lives* preserve at least some accurate information from second- or first-century BC biographies, they should be taken more seriously as witnesses to Hellenistic court life.

²⁹ Hunter 2003b: 41.

³⁰ Antagoras: *Vit. Arat.* 3.15.21–2; Paus. 1.2.3, Plut. *Mor.* 182f, Ath. 8.34of; Alexander: *Vit. Arat.* 1.8.12–13, 3.15.23–4; Persaeus: *Vit. Arat.* 3.15.20–1; 4.20.3–4; Diog. Laert. 7.6. On Persaeus see further Erskine 2011.

³¹ Bickerman 1938: 39–40 sees these expeditions as primarily commercial; Kosmin 2014b: chs. 1–2 and Visscher 2016: ch. 1 argue more strongly for ideological overtones and royal sponsorship of the generals' writings. Gruen 2017: 302–4 accepts royal stimulus for Megasthenes' work but is sceptical about any propagandistic or otherwise directly politicised dimension.

more clear-cut evidence for literary patronage. The *Lives of Aratus* state that the poet also visited the court of Antiochus I, citing in support Antigonus of Carystus and Dositheus of Pelusium (both third century BC).³² Several intellectual figures can be connected with the court of Antiochus III, albeit on the basis of some very late sources.³³ One is Euphoriion of Chalcis. According to the *Suda* he was put in charge of Antioch's public library by Antiochus III, and Marijn Visscher, who detects in the fragments of his work an engagement with Seleucid imperial discourse, argues that he should be viewed as 'a major representative of Seleucid literature'.³⁴ The *Suda* also states that the epic poet Simonides of Magnesia wrote about the deeds of Antiochus the Great, which might imply that he spent time at court.³⁵ A somewhat stronger source tradition is available for the historians Mnesiptolemus of Cyme and Hegesianax of Alexandria Troas, although, like Megasthenes and Patrocles, they also had political roles at court.³⁶ Citing the Hellenistic writer Demetrius of Scepsis, Athenaeus claims that Mnesiptolemus had great influence with Antiochus III, and reports that Hegesianax became one of Antiochus' favourite *philoi* after reciting his works to the king after dinner.³⁷ Later in the dynasty, the symposium of Alexander Balas described by Athenaeus not only locates another philosopher at the Seleucid court – the Epicurean Diogenes of Seleucia (on the Tigris) – but also constitutes a Seleucid parallel for the intellectual and social milieu at the Ptolemaic court portrayed in the *Letter of Aristeas*.³⁸

A final anecdote involving the Seleucid dynasty provides a telling variation on the theme of invitations to court which neatly sums up the cultural framework, and cachet, of Hellenistic royal patronage of Greek intellectual figures. Athenaeus, citing Hegesander of Delphi (ca. second century BC), quotes a letter purportedly from the Indian king 'Amitrochates' (the Mauryan ruler Bindusara, r. 297–273 BC) to Antiochus I. Continuing the

³² *Vit. Arat.* 1.8.22; 3.16.18–23. ³³ Primo 2009: ch. 1; Visscher 2016: ch. 4.

³⁴ *Suda* s.v. Εὐφορίων; Visscher 2016: 184–97. ³⁵ *Suda* s.v. Σιμωνίδης.

³⁶ *FGrHist/BNJ* 164 (Mnesiptolemus); *FGrHist/BNJ* 45 (Hegesianax); see further page 242.

³⁷ Mnesiptolemus: *Ath.* 15.697d; Hegesianax: *Ath.* 4.155b. ³⁸ *Ath.* 5.211a–d.

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diplomatic relationship established between his father Chandragupta and Seleucus I, Bindusara writes to ask Antiochus to buy and send him ‘sweet wine, dried figs and a sophist’.³⁹ Whether or not we accept its details, the anecdote illustrates the prominence of the (Greek) intellectual within the *paideia* ideology of Hellenistic kingship. Bindusara’s request is intended to show his credentials as a Hellenised ruler who consumes the intellectual as well as literal fruits of elite Greek culture. Unfortunately, the Indian ruler fails to hit the correct note in his transactional approach to the bearers of Greek learning; Antiochus replies that he will send the wine and figs, but ‘among the Greeks, it is not lawful (*ou nomimon*) for a sophist to be sold’.⁴⁰ Antiochus’ refusal serves to reinforce the idea, pervasive in our sources, that true philhellenism is a matter of proper royal behaviour, not simply acquisition and consumption. While a proper Greek ruler would know the correct way to get a sophist to his court, Bindusara’s request reveals the limitations of his philhellenism: understanding the external hallmarks of Greekness, he has failed to grasp the more essential *nomoi*.

5.2.2 *Patrons and Philoi*

If a royal invitation was successful, what then? What did it mean to be an intellectual at court, and what was one’s relationship with the king? Antigonus’ meeting with Antagoras is again paradigmatic, highlighting another persistent characteristic of Hellenistic royal patronage as represented in the surviving sources: the close and personal relationships between kings and Greek intellectuals at court. Even if Antigonus’ encounter with his court poet over the campfire looks like a humorous parody of the learned king – the ruler who tries to use Homer against the experts and whose pretensions to glory are unmasked and satirised instead – the fact that such parody was possible depends on the plausibility of close encounters between kings and scholars. Indeed, this social familiarity is a constant theme in the sources, both where individuals’ relations with the kings are described, as with

³⁹ Ath. 14.652f–653a. ⁴⁰ Ath. 14.653a.

Antigonus and Antagoras, and in more general depictions of court life. The symposiast king surrounded by a bevy of philosophers, as portrayed in the *Letter of Aristeeas* or Athenaeus' account of the symposium of Alexander Balas, dramatises the social relations between ruler and court intellectuals as close and informal; the *Symposium Memoirs* written by Persaeus of Citium would probably provide an Antigonid analogue, if more of them survived. These relationships are not represented simply as a link between patron and client, but as a bond between two *philoi*.

In understanding this dynamic it is important to remember the status of Greek intellectual figures at court, many of whom were aristocrats with considerable social and political clout in their own right. Although the Hellenistic period marks the rise of the full-time scholar through the development of institutions like the Museum, many of the poets, philosophers and other specialists who came to the Hellenistic courts belonged to an older paradigm. In the Classical Greek world, those who were able to devote all their time to intellectual pursuits were wealthy, of high social status, and usually influential within their community; many of their Hellenistic counterparts were similar. These men often *were* friends of Hellenistic rulers before their accession, and as *philoi* in the more formal sense which developed at the Hellenistic courts, their roles frequently extended to political advice and even diplomatic missions.⁴¹

One indication of the high status of these individuals is the coyness of the sources when it comes to their exact position at court. The mechanisms by which patronage was offered or sought, the terms in which it was couched, and in particular the forms of remuneration are almost never explicitly stated. For example, in a letter of Antigonus Gonatas to the philosopher Zeno quoted by Diogenes Laertius, the king asks Zeno simply 'to come to see me' (παραγενέσθαι πρὸς ἐμέ), with no explicit mention of time-scale or remuneration.⁴² Whether or not the letter is genuine, the delicate formulation reflects a relationship which both sides were concerned to represent as one of equals; explicit reference to payment

⁴¹ On Hellenistic *philoi*, see Herman 1980; Le Bohec 1985; Savalli-Lestrade 1998; Strootman 2011: 69–71; Savalli-Lestrade 2017.

⁴² Diog. Laert. 7.1.7.

might shatter the image. This does not mean that kings were above highlighting the underlying inequalities of such relationships or exercising their *de facto* power. In the letter to Zeno, for instance, Antigonus' gentle invitation is followed by 'since I am persuaded you will not refuse the request', a reminder of the king's ability to persuade should Zeno attempt to refuse.⁴³ Darker images of the power dynamic between ruler and scholar are offered by the story of Aristophanes of Byzantium's attempted defection and subsequent imprisonment, and by the fate of the comic poet Sotades, imprisoned (Plutarch) or drowned in a lead casket (Athenaeus) after lampooning Ptolemy Philadelphus' marriage to his sister.⁴⁴ At the very least, such narratives thematise anxieties about relationships between artists and autocrats and the danger of a dynamic of patronage turning into one of compulsion. Yet, overall, the consistency with which the sources present relationships between kings and the philosophers, poets and other artists they hosted at court as socially equal and relatively informal suggests that this was the expected pattern.

Nor were such relationships restricted to the kings; other members of the royal family also interacted socially with scholars at court. For example, Athenaeus relates that, after enquiring as to the nature of a rustic festival organised by her husband Ptolemy II (the Lagynophoria, where guests brought and consumed their own food and drink) Arsinoe II made a disparaging remark to Eratosthenes about the 'sordid' party.⁴⁵ What is actually reported as said in any of these cases is less important than the recurring framework: scholars and members of the royal family inhabited the same spaces, ate and drank together, and interacted socially on relatively equal terms. The overall impression of intimacy is further reinforced by the language in which intellectual figures'

⁴³ Diog. Laert. 7.1.7.

⁴⁴ Aristophanes: Suda A3936; Sotades: Ath. 14.620f–621b; Plut. *De liberis educandis* 11A. In the following section (11B–C) Plutarch also recounts the story of the sophist Theocritus, whose comic interjections displeased Alexander the Great and subsequently Antigonus, to the point that the latter killed him.

⁴⁵ Ath. 7.276b–c; Fraser 1972 I: 310. This case perhaps has a stronger claim to historicity than that of Antigonus and Antagoras, because Eratosthenes himself is named as the source and the fact that he was the recipient of the comment is not the point of the anecdote.

presence at court is described: ‘being with’ or ‘living with’ (συνεῖναι, συμβιοῦν, συνοικεῖν) the king in question is frequently the expression used.⁴⁶ This picture is, of course, often ideologically laden. Many sources feature the ‘paraded approachability’ which seems to have been a key aspect of Hellenistic kingship, while the sympotastic anecdotes are also part of the discourse surrounding Hellenistic royal *truphe*, luxury.⁴⁷ Yet the picture is consistent. It seems that, even allowing for literary patterning and later elaboration, relationships between kings and Greek intellectuals involved direct social engagement and might be sustained for long periods of time.

5.2.3 *Learned Kings*

The image of the king who dines and converses with philosophers not only conveys a sense of the close social relationships that could and did form between rulers and scholars, but also highlights these rulers’ intellectual competence – or at least, pretensions. This is a third recurring theme in the sources and its ubiquity suggests that it too captures something of the reality of royal engagement with Greek *paideia*. Antigonos Gonatas’ witty exchange with Antagoras of Rhodes is perhaps too good to be true in its details, but the ruler of Macedon bantering with his court poet about Homeric heroes is part of the image of the king as *philologos* (‘fond of learning, learned’) which pervades Hellenistic royal ideology.⁴⁸ After all, that was why kings needed to surround themselves with literati in the first place. As the first *Life of Aratus* spells out, Antigonos, ‘because he was fond of learning (*philologos*) and very keen on poetry considered it of great importance to have at his side many learned men’.⁴⁹ Being truly *philologos*, however, did not just mean collecting scholars, but interacting with them on equal terms, and even becoming one.

For many Hellenistic rulers this process began in their childhood. Continuing a pre-existing pattern of patronage most famously deployed by the Argeads in the case of Aristotle and

⁴⁶ Hunter 2003b: 40. E.g. Paus. 1.2.3; 3.14.12–14; 4.19.5–6. ⁴⁷ Hunter 2003b: 34.

⁴⁸ Erskine 2011: 181–2. ⁴⁹ *Vit. Arat.* 1.8.1; 3.14.12–14; 4.19.5–6.

Alexander,⁵⁰ many Hellenistic rulers invited leading Greek scholars to educate their children. The aim of this is neatly encapsulated by the epigram attributed to Eratosthenes from his letter on the doubling of the cube.⁵¹ Here, the writer praises Euergetes for giving his son, the future Ptolemy IV Philopator, ‘everything dear to both Muses and kings’ (πάνθ’ ὅσα καὶ Μούσαις καὶ βασιλεῦσι φίλα), a phrase which captures the combination of cultural and autocratic power cultivated by the dynasty.⁵² Philopator was not the first Ptolemy to receive tutelage from the greatest Greek minds of the time: Ptolemy II’s tutors were the poet Philitas of Cos, the Homeric scholar and later head of the Library Zenodotos, and the Peripatetic philosopher Strato. Other Ptolemaic tutors include Apollonius of Rhodes (Ptolemy III) and Aristarchus of Samothrace (Ptolemy VI).⁵³

On the basis of the surviving evidence, the Ptolemies seem to be the only dynasty to have formalised and sustained the position of royal tutor over several generations, perhaps aided by the connection between this position and that of head librarian, which may have made the role more attractive for its incumbents. Outside Alexandria, reports of royal tutors are scarcer. In Antigonid Macedon, Euphantos of Olynthus is mentioned by Diogenes Laertius as a tutor for Gonatas, and Persaeus of Citium for his son Halcyoneus; for the Attalids, one Lysimachus is named by Athenaeus as tutor of Attalus I, while an inscription of Attalus II from Ephesus praises a citizen who had taught his nephew, the future Attalus III.⁵⁴ For the Seleucids reports come late in the dynasty and involve figures not

⁵⁰ Diog. Laert. 7.36.

⁵¹ The epigram is generally accepted as genuine even by those who reject the body of the letter. See further Pfeiffer 1968: 155–6; Netz 2004: 294–8 (accepting both); Fraser 1972 I: 410–3 (rejecting the letter).

⁵² Fraser’s doubts that this alludes to Eratosthenes’ position as royal tutor are well-founded (Fraser 1972 II: 477 n.127), but the sentiment is not an obvious choice as a ‘general courtesy to the king’; since we know of no other tutor for Philopator, the possibility should not be dismissed. Even if there is no specific reference to Eratosthenes himself, the key point is the image of the Ptolemaic prince receiving an education in both arts and statecraft.

⁵³ Suda s.v. Ἀρίσταρχος; Ζηνόδοτος; Στράτων; Φιλίτας; *P.Oxy.* 1241 ii 3–5, 13–15 (a second-century AD papyrus containing a list of head librarians, which describes both Apollonius and Aristarchus as διδάσκαλοι. On the link between the position of librarian and royal tutor, see Fraser 1972 I: 322–3; Thompson 2007: 127.

⁵⁴ Euphantos: Diog. Laert. 2.110; Persaeus: Diog. Laert. 7.36; Lysimachus: Ath. 6.252c; Attalus III’s tutor: *I.Ephesos* 202 (the name is partially preserved: Aristod-).

independently known for their intellectual prowess: Diodorus, tutor of the future Demetrius I (r. 161–150 BC), who visited him in captivity at Rome and persuaded him to escape and make an attempt on the throne, and Craterus of Antioch, eunuch and tutor of the future Antiochus IX (r. 115–95 BC), who was commemorated with a statue at Delos by another Seleucid *philos*.⁵⁵

Even without a resident tutor, however, rulers were nonetheless exposed to the leading lights of Greek intellectual culture during their formative years. Several Hellenistic princes studied in Athens, following an educational trajectory typical for members of the Greek elite at the time. Attalus II was a pupil of the sceptic Carneades, and together with Ariarathes V of Cappadocia honoured his former teacher with a statue, while the encounters between Antigonus Gonatas and Zeno recorded by Diogenes Laertius may have taken place while Antigonus was a student in Athens.⁵⁶ It may or may not be significant that this pattern – assimilation to non-royal behaviour rather than royal appropriation of intellectual figures – occurs with the two dynasties which made the greatest efforts to present themselves as philhellenic in a non-autocratic sense. The Antigonids' precarious relationship with the Greek elites depended on minimising their *de facto* control, while the Attalids, latecomers to the world of Hellenistic power politics whose territory also included or neighboured numerous Greek cities, used their position as 'friends' of the Greeks to gain political support both in Asia Minor and on the mainland. The Attalid programme of investing in philosophers 'at home' in Athens rather than at court may also fit into this picture. The Ptolemies, on the other hand, largely insulated from the problem of 'Greek freedom' by their lack of territory in mainland Greece, able to exploit the great mineral and agricultural wealth of Egypt, and in possession of the greatest collection of written resources the Greek world had yet seen, could perhaps afford to be slightly more heavy-handed with their intellectual patronage.

⁵⁵ Diodorus: Polyb. 31.12; Craterus: *OGIS* 256; Euseb. *Chron.* 257; cf. Savalli-Lestradé 2017: 103–4.

⁵⁶ Attalus and Carneades: *IG* II² 3781; cf. Diog. Laert. 4.65 (Ariarathes' correspondence with Carneades); Gonatas: Diog. Laert. 7.13; 7.36 (although as Gabbert 2004: 5 notes, these episodes may also date from later in Antigonus' life).

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Early immersion in elite Greek intellectual culture gave Hellenistic rulers a strong sense of its cultural and political importance, the connections to cultivate further relationships with important figures, and the knowledge and rhetorical skill to engage with them on more or less equal terms. The anecdotes and allusions which highlight the intimacy between kings and scholars often also portray the intellectual quality of their interactions. Frequently, the scholar comes out ahead, but not always. An example of the clever king who manages to beat the learned expert at his own game is the encounter reported by Athenaeus between Ptolemy Philadelphus and the Homeric scholar Sosibius, who was known for creating ingenious solutions to textual problems by re-arranging sentence constituents.⁵⁷ The king instructs his accountants to stop paying Sosibius his usual stipend; when the latter comes to complain, Ptolemy reads out one syllable from each of the names of four scholars on the register who have already been paid, overall spelling out 'Sosibius'. Mocking Sosibius' own critical method, Ptolemy tells him: 'if you take the *So* from Soteros, the *si* from Sosigenes, the first syllable from Bion and the last from Apollonius, you will find that you have been fully paid, according to your own methods'. In a similar way, the *Letter of Aristeas* portrays Philadelphus as a thoroughly cultivated individual who tests the scholarly credentials of the Jewish translators through an intellectual inquisition which lasts seven consecutive evenings.⁵⁸ Many details of the symposium are fantastic, but the recurring theme of the king as learned interlocutor in such anecdotes is significant.

Heavily patterned though these anecdotes are, stories such as Antigonos' banter with Antagoras and Philadelphus' mockery of Sosibius' textual criticism underline the specifically *intellectual* aspect of relations between royal patrons and the poets, scholars and scientists they invited to court. In the surviving sources kings

⁵⁷ Ath. 11.463d–464b. The example of Sosibius' 'ingenuity' reported here is his solution of a perceived incongruity relating to Nestor's Cup, i.e. that Nestor is said to be able to lift without effort the cup which other men (presumably including the younger heroes present) struggled to raise (*Il.* 11. 636–7). According to Athenaeus, Sosibius transposed the word γέρων to the first line so that Nestor became the only one of the *old* men who could lift the cup without effort.

⁵⁸ *Ar.* 187–294.

do not just collect scholars; they interact with them intellectually, and take an active interest in their work. This interest could even extend to suggesting particular lines of research, or so later writers believed: one of the surviving *Lives of Aratus*, compiled by the second-century grammarian Achilles, relates that Antiochus I asked Aratus to redact the *Iliad* or *Odyssey*, and quipped that by transposing the *Catoptron* into verse he could enhance Eudoxus' *doxa*.⁵⁹

The idea of the learned king as commissioner or arbiter of cutting edge research also underlies a series of Hellenistic treatises or learned letters dedicated to particular rulers, some of which claim that the works they introduce have been royally requested. Of course, we cannot take these dedications at face value, but at a minimum they show that the image of the king who might enjoy or even request a learned disquisition had salience in a Hellenistic context, and could be expected to appeal to the intended royal recipients. The surviving dedications span the major dynasties. From Ptolemaic Alexandria comes, first, Eratosthenes' solution to the problem of doubling the cube: even if the letter itself is not by Eratosthenes, the epigram praising Euergetes effectively dedicates the solution and its monument to the king.⁶⁰ Two hundred years later, Ptolemy Auletes was the recipient of a more formal dedication in a commentary on Hippocrates' *On Joints* by Apollonius of Citium. The preface features the now familiar *topoi* of the learned king and the direct engagement between king and intellectual: Ptolemy is addressed as one 'well disposed to the medical art' (φιλιάρτως διακείμενον), and has, we are told, specifically commissioned the work from his eager correspondent.⁶¹ The Attalids, too, were cast in the role of learned recipients: Biton's treatise on war machines was addressed to a 'King Attalus', while Apollodorus of Athens dedicated his *Chronica* to Attalus II. The *Conics* of Apollonius of Perge, also dedicated to an 'Attalus', may be a red herring; Fraser is persuasive in arguing that this addressee, who lacks a royal title, is more likely a fellow mathematician than an Attalid

⁵⁹ *Iliad*: *Vit. Arat.* 1.8.23; *Odyssey*: *Vit. Arat.* 1.8.19; 3.16.6; *Catoptron*: *Vit. Arat.* 1.8.7.

⁶⁰ On the authenticity of the letter and epigram see n.51.

⁶¹ Apollonius Med. In *Hippocratis de articulis commentarius* 1.3–8.

ruler.⁶² True to form, the Seleucids are more elusive: the only example is an unusual passage cited by Pliny from a letter of one Archibios to an unspecified ‘Antiochus, king of Syria’, in which the otherwise unknown writer recommends burying a frog in a pot in the middle of a cornfield to ward off storm damage from the crops.⁶³

The image of the learned king in a sense finds its fullest expression in a dedication from outside the major dynastic group: the prologue to Pseudo-Scymnus’ *Periodos to Nicomedes*, a geographical poem dedicated to Nicomedes of Bithynia (either I or II). Just as Bindusara’s bumbling demand for a sophist highlights the importance of intellectual patronage through heavy-handed *imitatio*, so the prologue to the *Periodos*, designed to establish Nicomedes and his poet as on a par with the great Hellenistic kings and their scholars, reinforces (also in a rather heavy-handed way) the importance of the learned king within Hellenistic royal ideology. The author makes the usual rhetorical moves of dedicating the work to the king and playing upon the latter’s philhellenic pretensions with allusions to his literary models.⁶⁴ Nicomedes, in turn, is presented in by now familiar fashion as the generous patron who loves the arts and provides support for ‘all those who love learning’ (πᾶσι . . . τοῖς θέλουσι φιλομαθεῖν, 9–10). But this poet goes one step further, presenting learned generosity as integral to *being a king*: the poet intends to come to Nicomedes’ court so that he may see ‘what a king is’.⁶⁵ The prologue also goes beyond other works in its explicit formulation of the patronage relationship: the author observes that his model Apollodorus brought eternal glory to Attalus with the *Chronica*, not-so-subtly gesturing to the relationship he himself has in mind. Once again personal contact between patron and poet

⁶² Biton, Κατασκευαὶ πολεμικῶν ὀργάνων καὶ καταπαλτικῶν I; Apollodorus: *FGrHist/BNJ* 244 T2. Apollonius: Cuomo 2001: 113–15; Fraser 1972 I: 417–18. Polemo of Ilium’s letter ‘To Attalus’ is more difficult to judge; all we have are two quotations of the work’s title, which would not include the royal title in any case (cf. Hansen 1971: 400; *FHG* III: 135–6 Frs. 70, 72).

⁶³ Plin. *HN* 18.294.

⁶⁴ Hunter 2008: 510–11, 517–20. Another (later) address to a minor dynast is Babrius *pr.* 2.1–2.

⁶⁵ *PN* 53–4.

is implied in the use of verbs of meeting and seeing (παράγενέσθαι and ἰδεῖν, 53), while the twist on the invitation theme where the poet arrives unbidden strengthens the impression of royal interest: the writer is so confident about Nicomedes' royal generosity and appetite for his geographical masterpiece that he will make his way to the Bithynian court armed only with Apollo's encouragement and his literary gifts.⁶⁶

Yet rulers were not without their own gifts. As a coda to the discussion of kings' interactions with Greek scholars, it is worth recalling that some Hellenistic rulers composed literary, philosophical or scientific works themselves. Ptolemy I's history was later considered the most authoritative source on Alexander's campaigns by Arrian, while Galen twice quotes a poem about poisonous reptiles which is attributed to Antiochus VIII.⁶⁷ Here the paradigm of the learned king reaches its *telos*, with kings who did not simply dine with scholars, but were scholars themselves.

As the preceding survey illustrates, the sources for interactions between Hellenistic kings and Greek intellectual figures are far from uniform in quality and reliability. Despite some weaker links, however, when taken together they offer compelling testimony to a consistent royal interest in attracting Greek poets, artists, philosophers and other specialists, and to kings' personal investment in the social and intellectual circles that formed around them. Of course, this was hardly a radical innovation of the Hellenistic period: royal patronage of poets and philosophers had both Greek and Macedonian precedents at the courts of earlier tyrants and Argead kings. But the scale of the Hellenistic phenomenon represents an escalation compared with what had come before.

The presence and activities of these individuals contributed in various ways to the life of the court and the imperial projects of the Hellenistic kings. Some works had practical applications for warfare or imperial administration; others provided entertainment or instruction for the royal family and court; others offered praise or legitimisation (explicit or implicit). Yet the point was not to

⁶⁶ *PN* 55–64.

⁶⁷ Ptolemy: Arr. *Anab. pr.* 1; Antiochus: Gal. *De Antid.* 2. 14, 17 (although a similar antidote is attributed to Antiochus III by Pliny at *HN* 20.264). Cf. Strootman 2007: 209–10.

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patronise intellectual endeavour *per se*, but to patronise *Greek* intellectual endeavour. The emphasis on Hellenism in intellectual life and the frequently innovative types of intellectual production associated with the courts provided cultural cachet for the kings: competitive displays of *paideia* fed into the broader rivalry over the cultural heritage of the Greek world which was part of the ideological *koine* of Hellenistic kingship. Furthermore, a Hellenic focus was instrumental in creating an imperial culture for the new elites of the Hellenistic courts, who were drawn from all over the old Greek world or from new foundations in the east and were seeking common ground. What place was there, then, for the intellectual heritage of the other cultures over whom these elites and their masters ruled?

5.3 Priests and Pragmatists: Babylonian Scholars and the Hellenistic Kings

In Mesopotamia as in Greece, intellectual patronage was a significant feature of court life and royal ideology during the earlier first millennium. As we saw in [Chapter 4](#), under the Neo-Assyrian dynasty cuneiform scholars were invited to and supported at court, where they aided in royal decision-making, treated royal ailments, and ‘kept the watch of the king’ to ensure the safety of the land and its ruler. Indeed, the intellectual milieu at the Neo-Assyrian court was not limited to Mesopotamian scholars: from the eighth century onwards, augurs from Anatolia and Syria appear among the learned specialists at court in documents from the royal archives at Nineveh, while Egyptian ritual experts also begin to be attested after Esarhaddon’s conquest of Egypt in 671 BC.⁶⁸ Mesopotamia too had its ‘learned kings’: Aššurbanipal’s royal inscriptions frequently boast of his intellectual accomplishments, while those of the last ruler of the Neo-Babylonian dynasty, Nabonidus, attest to his antiquarian interests, dwelling at length on the king’s recovery of older royal inscriptions in the course of his own building projects.⁶⁹ Mesopotamian

⁶⁸ Radner 2009.

⁶⁹ Frahm 2011a discusses ‘learned kings’ in Mesopotamia. Neither Aššurbanipal nor Nabonidus was intended for the throne; Aššurbanipal was second in line and his

court scholarship in the earlier first millennium offers thought-provoking parallels with Hellenistic rulers' patronage of Greek intellectual figures, which would provide rich material for a comparative study of scholarship and empire. But here our focus is on connections during the Hellenistic period. Did the courts of the Hellenistic rulers provide a meeting place for specialists from different cultural and intellectual traditions? Did Alexander's successors extend patronage to the leading Babylonian scholars of their day, as they did to the poets, scientists and grammarians of the Greek world? Were their courts as intellectually cosmopolitan as those of the Neo-Assyrian kings?

On the basis of the surviving material, the answer seems to be negative. There is no evidence in the cuneiform sources for the kind of sustained and personal patronage of individual Babylonian scholars that we see for the Greek world. Although this is largely an argument *ex silentio*, it is significant since it speaks from a relative abundance of both Greek and cuneiform sources. It also fits the limited evidence for Ptolemaic interest in the scholarship of other cultures which we explored in [Chapter 4](#), and the fact that after Mesopotamia came under foreign rule it was the temples which continued as hubs of the Sumero-Akkadian intellectual tradition, with increasing distance from the royal court. Despite Persian reprisals against the northern Babylonian elites who revolted under Xerxes, the major temples continued their religious and scholarly activities, albeit in some cases with new personnel, and the Seleucid kings left them as largely self-governing, at least until the end of the third century.⁷⁰

intellectual training was probably preparation for a high cultic position, while Nabonidus was a usurper. As the examples discussed by Frahm reveal, the 'learned king', as distinct from the 'wise king' who did not necessarily claim knowledge of written scholarship (Frahm 2011a: 509), is the exception rather than the rule across the *longue durée* in Mesopotamian kingship.

⁷⁰ On the revolts under Xerxes and their aftermath, see Waerzeggers 2003; on the functioning of the temples under Hellenistic rule and their relationship with the Seleucid rulers, see Clancier 2011: 759–62, Clancier 2012 and Clancier and Monerie 2015, who argue for increasing Seleucid interference and a decrease in temple autonomy from late in the reign of Antiochus III. Monerie 2012 stresses the evidence for a degree of Seleucid control alongside local autonomy, particularly in fiscal matters, from the early third century onwards.

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Given the limitations of the source record, it would be foolish to make absolute pronouncements here. The absence of evidence for relations between Babylonian scholars and their Hellenistic (or Persian) rulers may be a result of the loss of Aramaic or Greek material or the generic conventions of what does survive: Sumerian and Akkadian literature did not have the type of biographical and anecdotal writing which has preserved many snippets of information about Greek scholars and Hellenistic kings. There are also a few tantalising hints of more extensive engagement in what *has* survived. The Cyrus Cylinder, a cuneiform royal inscription presenting Cyrus as the legitimate king of Babylon, and the pro-Persian (or at least pro-Cyrus) slant of several Late Babylonian Chronicles and related texts may suggest that Babylonia's scholarly elite enjoyed good relations with (some) Persian rulers.⁷¹ Several Greek anecdotes involving Alexander and the 'Chaldaeans', to which we will return later, show that the priestly elite were in contact with the conqueror, while the testimony of the Greek sources about Berossus writing for an 'Antiochus', fragile though it is, might hint at Seleucid analogues.⁷² From the Parthian period, a cuneiform document from Esagila records that one Itti-Marduk-balāṭu, a 'scribe of *Enūma Anu Enlil*' from Babylon, was sent by the temple assembly to Hyspaosines, the ruler of Characene; it is not clear, however, whether his celestial expertise or his political or social standing was the reason for this secondment.⁷³ None of these instances are

⁷¹ The Cyrus Cylinder (BM 90920; edition and bibliography: Schaudig 2001: 550–6; English translation by Finkel in Curtis, MacGregor, and Finkel 2013) presents Cyrus as the replacement found by Marduk for the sacrilegious Nabonidus. The *Nabonidus Chronicle* (ABC 7 = CM 26) and *Verse Account of Nabonidus* (edition and bibliography in Schaudig 2001: 563–78) paint a similar picture; it is hard to tell to what extent these accounts are driven by negative feeling against Nabonidus versus impressions of or interactions with Cyrus. The *ex eventu* Dynastic Prophecy also presents Cyrus' reign positively (ii 17'–24', following the restoration of van der Spek 2003: 313–16). This text has also been interpreted as offering an ahistorical prediction of Darius defeating Alexander the Great, which could be taken as further evidence of positive relations with the Persians (Grayson 1975a: 24–37; Neujahr 2005; Neujahr 2012: 58–71 with earlier bibliography); however, I find van der Spek's objections to this interpretation conclusive (Van der Spek 2003: 321–2, 324–32); Darius is one of the negative kings.

⁷² Pages 229–31.

⁷³ BOR 4, 132; cf. Clancier 2007: 33–4; Stolper 2006: 231–2, 245. Although Clancier takes this text as evidence for scholars' proximity to royal power in a way comparable to the situation at the Neo-Assyrian court, it is worth noting that Itti-Marduk-balāṭu is also

decisive evidence for Hellenistic royal interest in Babylonian scholars or their work, and to craft a narrative of intellectual patronage from such scraps seems precarious.

There is, however, a narrative to be written of interactions between Hellenistic rulers and Babylonian scholars. It is, overall, one of pragmatic engagement. Seleucid kings utilised the intellectual heritage of Babylonia not to flaunt their learning but to achieve their immediate political objectives: to gain local sympathies and conciliate the Babylonian priestly elite on whose expertise and support their decentralised empire depended. On the surface, this offers a stark contrast to the relationships we have observed between Hellenistic rulers and Greek intellectual specialists, although ultimately we will have reason to connect them on a deeper level.

5.3.1 *Kings of Babylon(ia)*

Perhaps the clearest example of the pragmatic element to the Seleucids' interactions with the temple scholars of Babylonia is also their closest attested encounter with Babylonian intellectual culture, with which we began this chapter: Antiochus I's temple restorations at Borsippa, and the cuneiform inscription in his name which memorialised them, the so-called Antiochus or Borsippa Cylinder (Figure 5.1). As the only surviving example of a cuneiform royal inscription for a Seleucid king, the Cylinder and the episode it describes provide key evidence for Seleucid patronage of Babylonian culture.⁷⁴ As many scholars have

described in the text as the holder of two other high administrative offices: *rab banī ša muḫḫi āli*, 'holder of the *rab banūtu* prebend over the city', and *uppuḫētu*, 'overseer' (an Iranian term – see Stolper 2006: 231–2) of the temples of the gods. *BOR* 4 132 concerns the reassignment of Itti-Marduk-balātu's temple duties and income to his sons (who are also scribes of *Enūma Anu Enlil*) since the former was now drawing income from the palace, but the text does not specify why he was sent to Hyspaosines; it is possible that he was there not as a celestial specialist but in his capacity as *rab banī ša muḫḫi āli* or temple overseer. Here again we observe the interpenetration of the political, religious and scholarly spheres in which the Babylonian elite were active.

⁷⁴ V R 66 = BM 36277. Copies: Strassmaier 1882: 139–42; Rawlinson and Pinches 1884, no. 66. Transliterations and translations: Weissbach 1911: 132–5; Kuhrt and Sherwin-White 1991: 75–7; Stevens 2014: 68–9. Online edition by van der Spek and Stol at *Livius*: www.livius.org/cg-cm/chronicles/antiochus_cylinder/antiochus_cylinder1.html; my revised edition: <http://oracc.museum.upenn.edu/cams/selbi/Q004179>. Translations: Pritchard 1969:

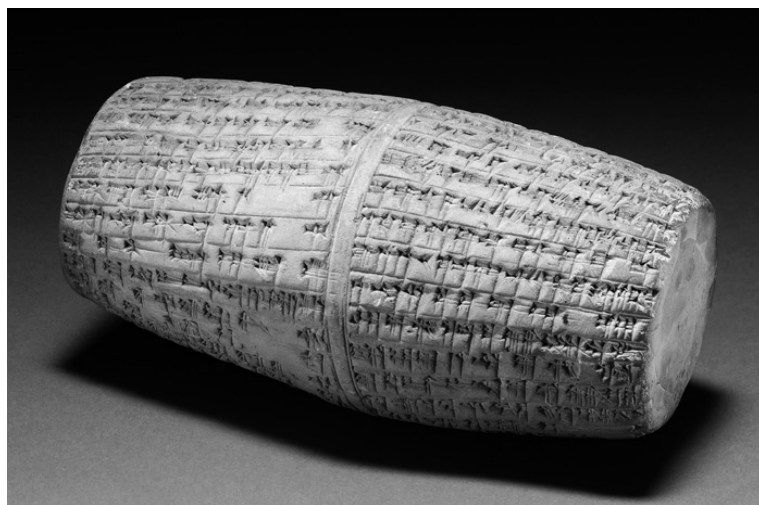


Figure 5.1 The Antiochus Cylinder from Borsippa (BM 36277) © Trustees of the British Museum

stressed, Antiochus' participation in the temple restorations serves to cast him as a good king according to traditional Mesopotamian royal ideology; the (re)building and upkeep of temples was part of rulers' divinely ordained mandate, and the royal inscriptions of Assyrian and Babylonian kings are filled with accounts of their building projects.⁷⁵ So too, the production of a traditional Akkadian royal inscription in archaising cuneiform script detailing Antiochus' restorations and presenting him as the loyal agent of the god Nabû suggests a significant degree of Seleucid investment in Babylonian culture.

There is nothing here, however, to suggest intellectual patronage comparable to what we see with Greek scholarship. Although the staging of the ritual and the production of the Cylinder required expertise in Akkadian and knowledge of Babylonian intellectual culture, it is not this on which Antiochus wished to capitalise.

317 (trans. Oppenheim); Austin 2006 no. 166. Translations of i.16–ii.29: Falkenstein and von Soden 1953: 291–2; Seux 1976: 525–6; Foster 2005: 866.

⁷⁵ E.g. Kuhrt and Sherwin-White 1991: 78–81; Capdetrey 2007: 56; Haubold 2013d: 135–41; Kosmin 2014a: 176; Stevens 2014: 77.

The scholars of Borsippa are involved in their cultic capacity, as priests of Nabû and intermediaries between the Seleucid king, his Babylonian subjects and perhaps also (depending on the level of cynicism on the Seleucid side) the divine protectors of Mesopotamia. The priests' linguistic competence in Akkadian and knowledge of the rhetoric and tropes of royal building inscriptions are used not to portray Antiochus as a learned king, steeped in the wisdom of the sages, but as a legitimate ruler from a Borsippian and Babylonian perspective.⁷⁶ The archaising script and ancient rituals constitute a contemporary act of political communication: the Seleucid ruler demonstrates his support for local culture and local norms, with the aim of gaining local support for, or at least co-operation with, imperial rule.

The political dimensions of the Cylinder and the transaction it captures are reinforced by the way in which the inscription combines Mesopotamian and Seleucid royal ideology, or perhaps more accurately, moulds the former to fit the latter. As several studies have argued, the inscription is not as traditionally Babylonian as it first appears.⁷⁷ For instance, Antiochus' titulary combines Akkadian epithets used by Persian, Assyrian and Babylonian rulers to create an emphasis on the monarch's strength and power which is not typically Babylonian but neatly fits the 'warrior king' image of Alexander's successors.⁷⁸ Another shift in emphasis can be seen in the description of the royal building project and the prayers; these subtly re-focus attention on the agency of the ruler, rather than that of the god as was typical for the genre.⁷⁹ The dynastic focus of Antiochus' inscription, which gives prominence to the queen and prince, offers a further innovation; it corresponds not to earlier Mesopotamian royal inscriptions, which

⁷⁶ On the Cylinder's conformity to (and perhaps reuse of) earlier examples of the genre, see Stevens 2014: 69–76.

⁷⁷ Kuhrt and Sherwin-White 1991: 83–5; Erickson 2011; Strootman 2013; Beaulieu 2014; Kosmin 2014a; Stevens 2014.

⁷⁸ 'King of Babylon' (*šar Bābili*) and 'provider for Esagila and Ezida' (*zānin Esagil u Ezida*) were standard Neo-Babylonian royal titles which were also assumed by several Assyrian rulers of Babylon; 'great king' (*šarru rabū*), 'mighty king' (*šarru dannu*) and 'king of the world' (*šar kiššati*) are more characteristic of Assyrian and Persian than Babylonian kings; 'king of the lands' (*šar mātāti*) first appears as a royal title under the Persians. See further Stevens 2014: 73–7.

⁷⁹ Stevens 2014: 77–82.

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centred on the person of the king, but to Hellenistic royal ideology with its emphasis on the royal family as a dynastic unit.⁸⁰ While debate continues over the precise ideological inflection of the Cylinder inscription and the image it presents of the Seleucids, it is clear that it reconfigures the typical phraseology of Mesopotamian royal inscriptions in line with Seleucid royal ideology.

Despite the fact that the Antiochus Cylinder draws on a long intellectual tradition, then, it reflects a politicised transaction between imperial court and local elite. This transaction need not be viewed as cynical and superficial; it is quite possible that Antiochus, who was born from an Iranian mother and spent a great deal of time in the eastern part of the empire, committed wholeheartedly to the religious aspects of the proceedings in Borsippa.⁸¹ But the key point is that Antiochus' investment in the ceremony and its memorialisation was not an act of intellectual patronage but a cultural performance with political implications. This was an act of cross-cultural engagement designed to win local support in Babylonia, particularly from the priestly elite who were crucial for the effective governance and stability of the region.

The Seleucids' other interactions with Babylonia's scholarly and religious experts are most plausibly viewed in a similar light. Various Seleucid kings funded temples and/or participated in religious ceremonies in Babylon, their contributions overseen by the local priesthood and recorded in cuneiform documents and scholarly texts. While he was still crown prince, the future Antiochus I performed offerings to the moon god Sîn (following the instructions of a Babylonian), prostrating himself in Sîn's temple; during his reign, the Antiochus Cylinder records his intention to restore the Esagila temple in Babylon as well as Ezida in Borsippa.⁸² More indirect support for the

⁸⁰ Kuhrt and Sherwin-White 1991: 83–5; Kosmin 2014a: 182–4; Stevens 2014: 79–81.

⁸¹ Antiochus I was the son of Apame, daughter of the Bactrian ruler Spitamenes and Seleucus' wife from the mass marriage at Susa (Arr. *Anab.* 7.4.6); Plut. *Demetr.* 31; Euseb. *Chron.* 249); Seleucus sent him to command the upper satrapies in the latter years of his reign (Appian *Syr.* 13.61–2).

⁸² *BCHP* 5; BM 36277 i.6–13.

temples is attested in a Chronicle from the 220s BC which reports the enactment of a letter from Seleucus III funding '11 fat oxen, 100 fat sheep and 11 fat ducks for the food offering within Esagila'.⁸³ His successor, Antiochus III, is captured by the cuneiform sources in several significant cultic performances. The Astronomical Diaries report Antiochus' participation in the *akītu* (New Year) festival – the most important event in the Babylonian ritual calendar – in 204 BC, and a ceremonial visit in 187 where the king prostrated himself at Esagila and received gifts from the assembled Babylonian elite and leaders of the Greek community.⁸⁴ These cultic performances could not have been undertaken without communication and collaboration with Babylonian ritual specialists and other members of the temple hierarchy, some of whom were the same scholars responsible for the preservation of the Sumero-Akkadian intellectual tradition. Further communications between king and local elite are attested in royal messages mentioned from time to time in the Astronomical Diaries.⁸⁵ But as with the Antiochus Cylinder, all these interactions were about local legitimisation and governance, not intellectual patronage.

Further corroboration for the pragmatic and politicised nature of these interactions may come from the fact that several can be linked to specific moments of imperial crisis or weakness for individual kings. Antiochus I's building programme in Borsippa and Babylon took place shortly after the First Syrian War (274–271) in which he had been roundly defeated by Ptolemy II.⁸⁶ When Seleucus III paid for fat ducks in Esagila

⁸³ *BCHP* 12 obv. 3'–6'.

⁸⁴ *AD* –204C rev. 14–18; *AD* –187A rev. 8'–10'. The timing of both these appearances in Babylon in relation to external affairs may be significant: in the first case Antiochus had just returned from his (successful) campaign in the East, while the visit in 187 followed a series of defeats by the Romans and the conclusion of the Treaty of Apamea in 188. See next page.

⁸⁵ E.g. *AD* –273B rev. 35', a message to the Babylonians sent via the satrap and royal appointees; *AD* –168A, the appointment of a *zazakku* by a message from the king.

⁸⁶ It is notable that the Astronomical Diary for April 273 BC which seems to record the revoking of a previous royal land grant (*AD* –273B rev. 36'–39'), probably in order to raise new taxes to fund the war with Ptolemy (Van der Spek 1993: 67–70), also mentions the moulding of bricks for Esagila – perhaps a highly visible benefaction intended to soften the fiscal blow.

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in 224 BC he was new to the throne, and not destined to hold it for long; his assassination the following year underlines the precariousness of his situation. Meanwhile, as Johannes Haubold observes, Antiochus III's visit to Babylon in 187 followed soon after his humiliating defeat by the Romans and the devastating consequences of the Peace of Apamea in which the Seleucids were forced to cede all territory west of the Taurus.⁸⁷ Although Antiochus' earlier visit in 204 came at the conclusion of a successful eastern campaign, it still followed a long period of royal absence from the region which may have caused anxiety locally about the Seleucid king's concern with Babylonia and the strength of the empire more generally.

Viewed against the broader political situation of each ruler, these moments of Seleucid investment look like targeted legitimising manoeuvres. A public performance of royal care and strength in Babylon in the wake of long absences or reverses elsewhere could be expected to allay concerns and shore up local co-operation. In turn, a lavish, public show of support from the elite of Babylonia's most powerful city, like the display in 187, would further boost the image of the king both within Babylon and across the region. It is true that our source record is severely lacunose; much is irrevocably lost, and future discoveries have the potential to alter the picture entirely. But the fragments we have suggest that the Seleucids' engagement with the scholars of Babylonia was pragmatic and sporadic, directed at particular cultural transactions and targeted to specific political need. We seem to be a long way from Antigonus, Antagoras and the conger eels.

5.3.2 *Foreign Kings and Local Experts*

As the preceding survey implies, the typical relationship between rulers and Babylonian scholars was not analogous in social or intellectual terms to that between kings and the Greek literati they invited to court. Members of the scholarly elite from

⁸⁷ Haubold 2016: 99–100.

Babylon (and probably those of other cities too) are likely to have come into contact with the Seleucid king or his representatives in their cultic or administrative capacities, but these interactions do not offer a parallel for the close social relationships between the Hellenistic kings and Greek scholars at court. Nor is there the specifically intellectual quality to the interaction; Babylonian scholarship was not used to contribute to the figure of the ‘learned’ king. The Babylonian ritual experts derived their knowledge and authority from their mastery of a prestigious scholarly tradition, but the Seleucid kings were interested in that tradition not to learn about Chaldaean scholarship but as a means of local legitimisation. The scholars were the local experts who made that legitimisation possible.

Relationships between Seleucid rulers and Babylonian scholars may therefore best be viewed within the broader paradigm of contact and co-operation between the Seleucids and the Babylonian elites, who occupied key administrative and political positions in the temples (and hence cities) of southern Mesopotamia. Members of these elites, some of whom intermarried with Macedonian and Greek settlers and adopted increasingly Hellenised names, played a crucial mediating role between the Seleucid authorities and local population.⁸⁸ Some will have had direct relationships with king or court, and in at least one case their own writings make an explicit claim to this effect. In the middle of the third century BC, the governor of Uruk, one Anu-uballiṭ from the Aḥ’ûtu family, sponsored restoration work on the Rēš temple and commemorated it in a traditional Akkadian building inscription. Composed in 244 BC, this inscription details Anu-uballiṭ’s restoration work ‘for the lives of the kings Antiochus and Seleucus’, and states that Antiochus (II) had bestowed on him the Greek name Nikarchos.⁸⁹ This need not mean that Anu-uballiṭ actually met Antiochus, but the fact that such a claim could be made is testament to the plausibility of contact between the Urukian elite and the royal house.

⁸⁸ See most recently Clancier 2011: 759–62; Monerie 2012.

⁸⁹ YOS I, 52; revised online edition by Eleanor Robson: <http://oracc.museum.upenn.edu/cams/selbi/Qoo4181/>. On this inscription see further Sherwin-White 1987: 29–30; Doty 1988; Clancier 2011: 759–60; Stevens 2016: 71–4.

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As with Antiochus at Borsippa, political expediency is paramount here; the Seleucid king and his court remain at one remove from intellectual activity at the Rēš. Several members of Anu-uballit/Nikarchos' family were scholars at the temple, but he himself was not, and it is in his capacity as political representative and temple benefactor that he stresses his relations with the royal family. The same is true of Anu-uballit/Kephalon, a later member of the same family, who dedicated further building work at Uruk 'for the life of Seleucus and Antiochus' during the reign of Antiochus III.⁹⁰ Although his father Anu-balāssu-iqbi and brother Anu-bēlšunu are attested as owners of scholarly tablets, Anu-uballit/Kephalon is not; he himself was an important administrative official with authority in the sanctuary and the broader civic community.⁹¹ The worlds of king and scholars are in close proximity, but they do not meet.

A further absence which corroborates these conclusions in a more general way is the lack of any reflection of personal royal patronage in the contemporary cuneiform sources. In contrast to the pervasive indications of patronage in Hellenistic Greek poetry and prose, the Macedonian kings very rarely appear in scholarly cuneiform tablets apart from in the dating formulae of colophons. With the exception of the Antiochus Cylinder, Sumerian and Akkadian genres traditionally associated with royal patronage or engagement with intellectual culture, such as royal praise poems, hymns, annals and inscriptions, are not applied to the Seleucids, although such compositions concerning former Mesopotamian kings were still copied and studied during the Hellenistic period.⁹² This is not to say that Babylonian scholars did not engage intellectually with contemporary kingship. King lists from Uruk and Babylon and *vaticinia ex eventu* texts from both cities which

⁹⁰ Doty 1988; Kuhrt and Sherwin-White 1993: 153; new edition by Robson: <http://oracc.museum.upenn.edu/cams/selbi/Q004180/html>.

⁹¹ Anu-balāssu-iqbi: *TCL* 6, 1; *Afo* 14, Taf.VI; Anu-bēlšunu: *TCL* 6, 32. While Anu-uballit/Nikarchos is 'governor', *šaknu*, Anu-uballit/Kephalon bears the title *rab ša rēš āli ša bīt ilāni ša Uruk*. The exact nature of the latter title is disputed, but it seems to have combined civic and temple authority (McEwan 1981: 26–7; Joannès 1988; Clancier 2011: 759; Monerie 2012: 338–9).

⁹² E.g. from Uruk: *SpTU* 1, 2 (Chronicle relating to Šulgi; see further Chapter 7); *SpTU* 2, 31 (royal inscription of Aššurbanipal); *SpTU* 3, 58 (crimes of Nabû-šuma-iškun); *SpTU* 4, 126 (hymn/prayer to Lugalbanda).

‘predict’ the reigns of a series of good and bad rulers show that scholars within the Babylonian temples were interested in models of kingship, and measured present and future rulers against a moralising discourse informed by the past.⁹³ However, these are abstract and allusive compositions; there is nothing in them to suggest royal patronage of cuneiform scholars, or the expectation of such a relationship on the part of the scholars themselves.

The only Hellenistic cuneiform texts in which the Seleucids regularly feature are the Chronicles and Astronomical Diaries. Here, they come across not as known individuals with personalities but rather as actors studied from afar. This is in large part a result of the generic conventions and purpose of these texts, which ‘almost like a cardiogram . . . seem to plot the vital functions of the kingdom from year to year,’ as Drews evocatively puts it.⁹⁴ Earlier Babylonian and Persian rulers are mentioned in the same dispassionate way, alongside the movements of planets and the shifting market exchange rate for barley. Yet one element of the texts which reinforces the impression of distance between king and scholars is the way in which the Diaries and Chronicles record information from or concerning the king. No direct or personal communications with the Seleucids are mentioned; royal pronouncements tend to enter the text as messages sent ‘on a leather scroll’ to the Babylonians, conveying a sense of remoteness from the world of the court.⁹⁵ Scribes also regularly preface information about events involving the royal family with ‘I heard’ or ‘it was heard’, suggesting that their information is second-hand. For example, a Diary for 169–168 BC reports in month five: ‘That month, I heard as follows: king Antiochus marched victoriously through

⁹³ The Uruk King list (edition Grayson 1980) runs from Kandalānu (r. 647–627 BC) to Seleucus II; the Babylonian King List of the Hellenistic Period (*CM* 4) runs from Alexander the Great to Demetrius II (r. 145–138; 129–125 BC). *Ex eventu* texts: The Dynastic Prophecy, a text from Babylon which ‘predicts’ the reigns of a number of kings from the Late Babylonian to the early Hellenistic period, is published in Grayson 1975b: 24–37. On the interpretation of this disputed text see van der Spek 2003: 311–32; Neujahr 2005; Neujahr 2012: 58–71. On the Uruk Prophecy (*SpTU* 1, 3), an *ex eventu* text from Uruk which predicts a series of good and bad kings and may have resonances for the early Seleucid period, see pages 360–1, with bibliography.

⁹⁴ Drews 1975: 44.

⁹⁵ Messages sent on a leather scroll: *AD* –273B rev. 35’; –241 9’; possibly also *AD* –249B rev. 15’ (restored).

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the cities of Meluḥḥa and [...]’.⁹⁶ This may be in part literary convention, but might also reflect the reality of information networks in which cuneiform scholars, unlike their Greek counterparts, did not have consistent first-hand knowledge of court life or contact with the king.

There are, however, two intriguing episodes which place Babylonian scholars at the courts of Macedonian kings (although not that of the Seleucids), which must be considered as a final twist to our narrative: Alexander the Great’s encounter with the substitute king in Babylon, and an unusual extispicy at the Attalid court.

5.3.3 *Chaldaeans at Court*

The first episode takes place in the palace at Babylon shortly before Alexander’s death. It is related, among other ominous happenings which supposedly presaged the king’s demise, in three slightly different versions by Diodorus, Plutarch and Arrian.⁹⁷ Diodorus writes as follows:

While the king (Alexander) was being anointed with oil, and the royal robe and diadem were lying on a chair, one of the natives, a prisoner, was spontaneously freed from his fetters. Escaping the notice of the guards, he passed unhindered through the doors of the palace. He went to the throne, put on the royal robe, bound the diadem round his head, then sat on the throne and kept quiet. When the king realised what had happened, he was terrified at the strange event, but approached the throne and without showing his agitation asked the man quietly who he was and why he had done this. When the man made no reply whatsoever, Alexander consulted the seers as to the interpretation of the portent and put the man to death in accordance with their judgement, so that the evil which was forecast would be turned upon him. He picked up the clothing and sacrificed to the gods who avert evil, but continued to be seriously troubled.⁹⁸

⁹⁶ *AD*–168A obv. 14’–15’; cf. *AD*–253B₁ 6’: ‘That month, it was heard in Babylon: queen Stratonike died in Sardis’; *BCHP* 10 rev. 5’–6’: ‘[Tha]t [month] I heard as follows: “Seleucus, son of [Antiochus, was in the city of Si]ttake, a renowned city, and he [ascen]ded the roy[al] throne.”’ It is possible that such reports refer to the reading out of royal messages (in the Parthian Diaries there are explicit references to royal letters being read out in the theatre).

⁹⁷ Diod. Sic. 17.116.2–4; Plut. *Alex.* 73.7–74.1; Arr. *Anab.* 7.24.1–3.

⁹⁸ Plutarch and Arrian offer minor variations. In Plutarch Alexander is playing ball and the man on the throne is a prisoner from Messenia. In Arrian he leaves the throne to get a drink and the eunuchs begin to tear their clothes (reflecting a lamentation ritual);

Viewed with knowledge of traditional Babylonian culture and religious practices, this is clearly a garbled account of the substitute king ritual, or more precisely, an account which records the elements of the ritual but apparently fails to appreciate the ritual context in which they are performed. As we saw in [Chapter 2](#), the substitute king ritual was performed in Mesopotamia in response to a bad omen portended by an eclipse, which threatened the life of the reigning king.⁹⁹ The real king left his throne, went into hiding, and was addressed as ‘the farmer’ to symbolise his abdication of royal status. Meanwhile, a substitute, usually a condemned prisoner or other enemy of the king, was enthroned, and the bad omens were ritually transferred to him. The substitute king was treated like the real ruler, enjoying a splendid but brief existence in the palace until, after a prescribed period of time, he was executed. This fulfilled the omen, dissipated the evil and made it safe for the real king to return.¹⁰⁰ There are several references to the performance of the ritual in the Neo-Assyrian royal correspondence; it is unclear whether it was performed under the Neo-Babylonian kings.

It seems that, whether with or without Alexander’s knowledge, the Babylonian priest-scholars initiated a substitute king ritual. The key elements are visible despite the confusion of the sources: the use of a condemned prisoner; the substitute wearing the king’s clothes (an important stage in transferring the bad omens to him), and his execution in response to evil foreseen by the Chaldaeans. In one sense this case is parallel to the Seleucid examples examined above. Alexander is in Babylon, and so the performance of a Mesopotamian ritual could be viewed purely in terms of local patronage; the Chaldaeans have been allowed to continue their practices without royal interference, but without much royal interest either, until they impinge on Alexander’s massage (or ball game, in Plutarch). Alexander’s apparent confusion could be used to support this reading; neither he nor any of the writers who reported the scene, and from whom Diodorus, Plutarch and

Alexander tortures the man and the seers predict disaster, but the execution is not recorded.

⁹⁹ See page 42.

¹⁰⁰ On the substitute king ritual, see further Parpola 1983b: xxii–xxxii.

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Arrian derived their accounts, seem to have possessed any understanding of the theory behind what was going on. Similarly, the disconnect between king and Chaldaeans replicates the (lack of) relationships between the Seleucids and their Babylonian scholars. The bewildered king at the mercy of the foreign experts cuts a very different figure from, for instance, Ptolemy Philadelphus browbeating Sosibius by parodying the Homerist's own techniques of textual criticism.

In another sense, however, the case of Alexander and the substitute king is a significant exception. These Chaldaeans are at court, in the entourage of a Macedonian ruler and with personal access to him. What is more, Alexander's willingness to follow their advice regarding his safety in this instance, and indeed on other occasions, if we can believe the Alexander historians, takes us beyond local patronage and into the realm of royal decision-making.¹⁰¹ Like their successors who served the Seleucids, these Babylonian experts are useful to Alexander in a pragmatic way: he needs their prognostic and ritual expertise, not their wit or the cultural cachet their presence provides. But this example begins to reduce the vast distance we have conjured between the Greek and Babylonian intellectual specialists with whom Hellenistic rulers interacted. Although the confused Alexander in the midst of the Chaldaean diviners is a poor analogue for Philadelphus debating with the Jewish translators of the Septuagint over dinner, we are perhaps not so far here from the medical specialists or engineers who received patronage at Alexandria.

If Alexander was the only ruler to be associated with the Chaldaeans, this would not constitute significant evidence for Hellenistic practice; as illustrated by the mass marriages at Susa and his failed attempt to introduce *proskynesis* (if such it was), Alexander's engagement with Near Eastern tradition was not

¹⁰¹ Plut. *Alex.* 73 reports that Alexander initially ignored the Chaldaeans' warnings not to enter Babylon but later regretted it and spent most of his time outside the city; in Arrian, following Aristobulus of Cassandreia (7.16.5–17.6) he is suspicious of the Chaldaeans' motives but ready to accommodate their wish that he should not enter at that time and should take an eastern route, until swampy ground forces him to go west; in Curtius Rufus (10.4) Alexander is again inclined to heed the warnings, this time due to the Chaldaeans' excellent reputation and their constant rigour or earnestness (*adseveratio*), but is persuaded against it by Anaxarchus the Greek philosopher.

always imitated to its fullest extent by his successors.¹⁰² But he is not alone. Nearly one hundred years after the incident in the throne room at Babylon, a Babylonian turns up in the retinue of a Hellenistic king, at Pergamon. Sudines, a ‘Chaldaean’ liver diviner who may or may not be identical with the astrologer we met in [Chapter 2](#), features in an anecdote which appears with slight variations in the *Stratagemata* of Polyaeus and Frontinus.¹⁰³ This Sudines helps either Attalus I (Polyaeus) or Eumenes II (Frontinus) to inspire his troops before a battle with the Gauls.¹⁰⁴ To follow the fuller version of the story, in Polyaeus, Attalus is about to draw up his army against the Galatians, but notices that his troops are panic-stricken. In order to endow them with courage, he organises an extispicy, with Sudines presiding. Polyaeus continues:

ὁ μὲν εὐξάμενος καὶ στείσας ἀνέτεμε τὸ ἱερεῖον· ὁ δὲ βασιλεὺς κηκίδα τρίψας ἐπέγραψεν ἐπὶ τὴν χεῖρα τὴν δεξιάν ‘βασιλέως νίκη’ ποιησάμενος τὴν ἐπιγραφὴν οὐκ ἀπὸ τῶν ἀριστερῶν ἐπὶ δεξιά, ἀλλ’ ἔμπαλιν ἀπὸ τῶν δεξιῶν ἐπὶ τὰ ἀριστερά· καὶ τῶν σπλάγχχνων ἐξαιρουμένων ὑπέσχε τὴν χεῖρα, τῆς κηκίδος εἰς θερμὸν καὶ ἀραιὸν λοβὸν ἀπομαζάμενος τὴν ἐπιγραφὴν. ὁ μάντις ἐπεξιών τοὺς λοβοὺς καὶ τὴν χολήν, πύλας τε δὴ καὶ τράπεζαν καὶ ὅσα ἄλλα σημεῖα κατανοῶν ἀνέστρεψε τὸν λοβὸν τὸν ἔχοντα τὴν ἐπιγραφὴν, δι’ ἧς ἐδηλοῦτο βασιλέως νίκη. αὐτοὺς τε οὖν ὑπερχαρῆς ἐγένετο καὶ τῷ πλήθει τῶν στρατιωτῶν ἔδειξε τὸ σημεῖον· οἱ δὲ ἐλθόντες καὶ ἀναγνόντες θάρσους ἐνεπλήσθησαν καὶ πάντες ἀνεβόησαν κελεύοντες ἄγειν ἐπὶ τοὺς βαρβάρους καὶ προθύμως ἀγωνισάμενοι τοὺς Γαλάτας ἐνίκησαν.

¹⁰² Susa weddings: Arr. *Anab.* 7.4.4–7.5.6; Plut. *Alex.* 70.3; Ath. 12.538b–539a (citing Chares of Lesbos); *proskynesis*: Arr. *Anab.* 4.10.5–12.5; Curt. 8.5.5–24; Justin 12.7.1–3; Valerius Maximus 7.2 ext 11 (but see Bowden 2013’s sceptical re-examination of the evidence for Alexander and *proskynesis*).

¹⁰³ Σουδίνου Χαλδαίου μάντεως (Polyaeus, *Strat.* 4.20; cf. Frontin. *Str.* 1.11.15). As Rochberg remarks (2011: n.25), combined expertise in celestial scholarship and extispicy is not very common among Babylonian scholars, but in the later first millennium there were attempts to link the two. Several members of the Ekur-zākir family in Hellenistic Uruk owned or copied both *Bārūtū* and astrological texts, as well as a tablet which links ominous areas of the liver to zodiacal constellations, *SpTU* 4, 159 (Stevens 2013: 222–3).

¹⁰⁴ Frontinus says simply ‘Eumenes’, but as Eumenes I is not recorded as having fought the Gauls this must refer to Eumenes II, who was victorious in several battles over Gallic tribes in the 180s BC (Ma 2013: 53–4). On the Sudines episode, and what it suggests not only about historical relations between Hellenistic kings and Babylonian specialists, but also about Greek and Roman representations of Chaldaeans, see Haubold unpublished.

5.3 Priests and Pragmatists

Sudines, after praying and making a libation, cut open the sacrificial animal. Meanwhile the king wrote in ink on his right hand ‘victory of the king’ – not from left to right, but from right to left. Then, when the internal organs were lifted out, he placed his hand underneath them, and made an impression of the writing on a warm and spongy lobe (of the liver). As the diviner went through the lobes of the liver and the gallbladder, looking for the ‘gates’ and the ‘table’ and all the rest of the ominous zones, he turned over the lobe that had on it the writing which signified the victory of the king. Sudines himself was overjoyed and showed the omen to the body of the troops, who, after they came up and read it, were filled with courage. They all began to shout out, ordering Attalus to lead them against the barbarians, and they fought bravely and defeated the Gauls.

Frontinus’ account is similar, except that here Sudines himself receives the credit for the stratagem. There are obvious questions about historicity here. First, this is to some extent a ‘floating anecdote’; not only do Polyaeus and Frontinus disagree about the identity of the Attalid ruler involved, but the ruse of writing a positive omen on the liver to deceive the troops is also attributed by Frontinus to Alexander the Great and by Plutarch to the Spartan commander Agesilaus.¹⁰⁵ Furthermore, some of the details of the scene are suspect. Was the ‘overjoyed’ Sudines in on the act from the start, or are we supposed to accept that he could not tell the difference between naturally occurring marks on the *exta* and Greek words tattooed in fresh ink?¹⁰⁶ Should we imagine Attalus or Eumenes standing off to the side scribbling discreetly on his hand during the sacrifice? Yet the possible presence of a Babylonian scholar at a Hellenistic court, especially a court outside Babylonia, is rather hard to ignore.

Is this Sudines the genuine Babylonian article? Several elements combine to suggest an affirmative answer. First, there is the designation ‘Chaldaean’ – although on its own this is inconclusive since it could be applied to those of other ethnicities who had expertise in the ‘Chaldaean’ domains of astrology and

¹⁰⁵ Frontin. *Str.* 1.11.14–15; Plut. *Mor.* 214c–f. A somewhat similar episode involving Alexander the Great is also recorded by Polyaeus (*Strat.* 4.3.14) but the ruse of writing on the liver is absent; Alexander simply has victims that have been declared propitious by the soothsayers carried around the army to encourage his soldiers.

¹⁰⁶ Polyaeus’ wording is slightly ambiguous: Sudines is either an unwitting agent or a willing accomplice in Attalus/Eumenes’ manipulation of ritual for his own ends. Haubold [unpublished](#) argues that Polyaeus deliberately plays down the Chaldaean’s agency. In Frontinus’ version he is definitely complicit.

astrology. Second, Sudines' identification and role as a liver diviner link him to the Babylonian discipline of *bārûtu*, liver divination. In Frontinus he is explicitly labelled a *haruspex*, and although Polyaeus' *mantis* is a more generic word for a diviner, Sudines' actions in the story make the connection with extispicy clear.¹⁰⁷ The way in which Sudines checks the entrails could suggest someone versed in the Mesopotamian discipline of liver divination: the order in which the *exta* are listed (liver then gallbladder) follows the order of inspection used in the standard Akkadian liver omen series *Bārûtu*, while the specific ominous areas, the 'gates' and 'table', recall the Babylonian terms 'palace gate' and 'base of the throne' (Greek *trapeza* denotes a flat surface on which another object rests). Conversely, nothing in the description *needs* to imply a specifically Babylonian cast to the proceedings. Such details of the procedure as are given could equally well refer to Greek extispicy, which was ultimately derived from Mesopotamian practice but had a long history of its own already by this period.¹⁰⁸ The clinching evidence for a genuine Chaldaean connection is Sudines himself, or rather, his name, which is likely to reflect the Akkadian *Šum(a)-iddin*.¹⁰⁹ As Akkadian was no longer the vernacular language of Babylonia by this point, the use of a traditional Akkadian name implies that Sudines was not only Babylonian, but also a member of the priestly elite who dominated scholarly circles; their onomastic usage remained conservative even though Aramaic was now the spoken language in Babylonia.¹¹⁰ Whatever actually happened at the sacrifice, it seems that we do have a Babylonian scholar at the Attalid court.

Although isolated and problematic in its details, the case of Sudines is important because it raises the possibility that, just as a Greek philosopher from Athens might end up at Alexandria, Pergamon, Antioch or Pella, Babylonian scholars too could find patronage at Hellenistic courts. Their roles there and their relationships with the kings are unlikely to have been analogous to those

¹⁰⁷ Frontin. *Str.* 1.11.15; Polyaeus, *Strat.* 4.20.

¹⁰⁸ Collins 2008: 322 (citing the example of hepatoscopy from Euripides' *Electra* (written ca. 410 BC) which already mentions some of the technical terms, e.g. 'gates'); Furley and Gysembergh 2015: 97–106; Haubold unpublished.

¹⁰⁹ See page 57. ¹¹⁰ Beaulieu 2011: 252.

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of their Greek counterparts: there is nothing to suggest close relations with the rulers, and neither Alexander's confusion nor Attalus' cynical appropriation of the extispicy procedure suggests that kings competed to display their knowledge of Babylonian divination in the same way as they did with Homeric criticism. Rather, this interaction fits perfectly into the pattern of pragmatic engagement with Babylonian ritual and scholarship that we have seen throughout the chapter. Any royal investment here seems to be practical, aimed at legitimisation, and very much in Greek terms, as symbolised rather neatly by the writing of the omen in *Greek* on the liver.

Yet the case of Sudines takes us beyond the others, for two reasons. The first is that this is an encounter between a Hellenistic king and Babylonian scholarship which cannot be analysed in terms of cultural performance and political legitimisation for local audiences. If anything approximating Polyaeus' account ever took place, then we have evidence of a Hellenistic ruler drawing on Babylonian ritual for legitimisation and support in a *Hellenic* context. Unlike Antiochus laying the bricks of Ezida, which can be written off as an accommodation to or appropriation of local religious practice, Attalus' interactions with Sudines, and perhaps also Alexander's relationship with the Chaldaeans, imply that a Hellenistic king could take Babylonian scholarship seriously for its own intellectual content and ritual efficacy.¹¹¹ Again, this reduces the gulf between the positions of Greek and Babylonian intellectual culture vis-à-vis Hellenistic kingship.

The second reason Sudines is important is that even a single Babylonian specialist at a Hellenistic court, particularly outside of Babylonia, provides a possible vector for cross-cultural exchange. Our examination of royal relationships with Greek and Babylonian scholars has not yielded much evidence that the kings themselves were important catalysts for the meeting of these two intellectual cultures; the transmission of Babylonian scholarship to the Greek world, or even the appropriation of 'barbarian wisdom' from the Chaldaeans, does not seem to have been a royal priority. But if Greek and Babylonian intellectual

¹¹¹ Cf. Haubold [unpublished](#).

specialists moved in the same or even proximate circles, then there is the potential for contact and exchange. In terms of the narrative of cross-cultural exchange and influence which forms one key strand of our Hellenistic intellectual history, Sudines thus stands alongside Berossus and the astronomers of Babylon and Alexandria as a possible conduit for contact.

In terms of our inquiry into relations between Hellenistic kings and scholars, however, he stands alone. All in all, the various interactions attested between Hellenistic kings and Babylonian scholars fall within the range of pragmatic political and cultural manoeuvres made by foreign rulers and local elites for the sake of mutual interest. Men like Anu-uballit/Nikarchos were approached and utilised by the kings for their social status and political and/or religious expertise, rather than their learning; if they were also scholars they pursued their own intellectual agenda both before and after their brush with royalty. Only Berossus seems to have attempted to combine his priestly authority and scholarly training to engage intellectually with the new rulers, but as we have seen, there is no clear evidence that the engagement for which he hoped was forthcoming.

Perhaps, in the course of their dealings with the Babylonian elite, kings did learn something of traditional Mesopotamian intellectual culture, but nowhere does this appear to be an active aim. There is at present little to no evidence that Seleucid interest in Babylonian scholars and their intellectual activities went further than what was necessary to obtain local legitimisation and facilitate good relations with their subjects. Beyond the Seleucid realm, Alexander's unwitting participation in the substitute king ritual and Attalus or Eumenes' cunning manipulation of liver divination provide tantalising exceptions to this picture, and give us a glimpse of an alternative scenario in which Babylonian scholars might find patronage at the courts of Hellenistic rulers. But they remain just that: exceptions. Until or unless we find further evidence to the contrary, the voices of the majority of our surviving sources, and more importantly their silences, must be heard.

5.4 The View from Babylon: Greek Intellectual Patronage Revisited

Our comparative survey of royal interactions with Greek and Babylonian intellectuals has not uncovered much common ground: these specialists did not enjoy equal access to or social status at the Hellenistic courts, and royal investment on the Babylonian side lags far behind the Greek in its depth and intensity. In this case, examining the Greek and cuneiform evidence in parallel does not yield a new cross-cultural link, and on the surface the relationship of these two intellectual traditions to Hellenistic kingship is completely different. What the cross-cultural comparison does contribute, however, is an approach to the cuneiform evidence which when applied to the Greek material offers a new perspective on Greek intellectual patronage. This in turn enables us to view the situation of Greek and Babylonian scholarship vis-à-vis the Hellenistic kings as less diametrically opposed than our analysis so far has suggested.

When it comes to interactions between Babylonian scholars and the Hellenistic kings, the source record is so scanty that by default we evaluate each individual case in great detail. Moreover, with comparatively few cases it is easy to spot apparent patterns and link them to specific political contexts, however fragile we must acknowledge such patterns and links to be. In the case of kings' interactions with Greek intellectual culture, by contrast, the source record is overall so rich that it is easy to homogenise it. Discussions of Hellenistic royal patronage often sweep through an exhilarating variety of rulers, scholars and professional specialisms – rather as in the first part of this chapter – so that one comes away with an overall image of ubiquitous, consistent and personal royal interest in individual intellectuals and their work. Yet if we apply the same detailed case-by-case scrutiny demanded by the Babylonian evidence to the sources on Greek intellectuals' relationships with kings, this image starts to break down. Arguably, enough of its individual pixels may even shift to produce a rather different overall picture. Two aspects in particular benefit from re-evaluation: the relationship between specific kings and scholars,

and the ubiquity and consistency of intellectual patronage across the dynasties and through time.

5.4.1 *Scholarship or Politics? Patterns of Patronage*

On closer inspection, some of the interactions between Hellenistic rulers and Greek intellectual figures seem less driven by a commitment to Greek *paideia* than is often assumed. Perhaps the best example is Demetrius of Phaleron. A former student of the Athenian Lyceum and prolific writer, Demetrius governed Athens for ten years for the Macedonian dynast Cassander.¹¹² After falling from favour on the Greek mainland, he came to the Ptolemaic court around 297 BC. He is frequently credited in modern scholarship with being a key player in the foundation of the Library of Alexandria and is listed alongside other philosophical or literary figures who were part of the Ptolemaic court.¹¹³

Although there is no denying Demetrius' scholarly credentials, in his interactions with the Hellenistic dynasts as reported in the ancient sources he is very much a political figure. He and Cassander may have shared a love of Homer, but as Cassander's agent in Athens Demetrius' services were political, military and administrative.¹¹⁴ Similarly, his emigration to Alexandria, after ten years as an exile in Thebes, seems to have been triggered not by the intellectual attractions of the Ptolemaic court, as Hans Gottschalk and Michael Sollenberger assume, but the death of his protector Cassander.¹¹⁵ The surviving sources present the move as flight or expulsion, and it is significant that none of them claim that he was invited by Ptolemy.¹¹⁶ Gottschalk may be right that Demetrius' Peripatetic connections were part of the

¹¹² Diog. Laert. 5.80–1 lists 45 works. On Demetrius as a Peripatetic, see Fortenbaugh and Schütrumpf 2000: 25, 29–33, 39–41.

¹¹³ E.g. Fortenbaugh and Schütrumpf 2000: 343–5; Mossé 2000; Collins 2000: ch. 4; Honigman 2003: 88–90.

¹¹⁴ Homer: Eust. *Comm. Ad Hom. Il.* 1360, 32–40. For Demetrius' activity at Athens, cf. Fortenbaugh and Schütrumpf 2000, Frs. 16A–23A.

¹¹⁵ Gottschalk 2000: 372; Sollenberger 2000, n.28.

¹¹⁶ Fortenbaugh and Schütrumpf 2000, Frs. 1, 2, 19, 20B, 30, 35–6, 40. Diogenes Laertius (5.78) and Strabo (9.1.20) state that after Cassander's death Demetrius fled in fear. Flight or expulsion also constitute the frameworks in Diodorus (20.45.4), Plutarch (*Mor.* 601f), Cicero (*Fin.* 5.19.54) and the Suda.

reason for selecting Alexandria, but overall this looks more like the flight of a political actor in search of safety and influence abroad than a philosopher seeking patronage.

Demetrius' reported interactions with Ptolemy after his flight to Egypt also portray him as political advisor rather than court scholar. Aelian makes him responsible for legislation, while it is telling that Diogenes Laertius, the source of so many anecdotes about relations between philosophers and kings, mentions only Demetrius' political advice to Soter not to make Philadelphus his successor (and its ultimately infelicitous consequences).¹¹⁷ It is evident that Demetrius was an important figure at the court, on intimate terms with the royal family, but as Pfeiffer observes: 'There is not one word about Demetrius' assistance to Ptolemy I in cultural matters either in this [Diogenes] or in the other ample biographical literature'.¹¹⁸ Only in the *Letter of Aristeas* and later sources which may be dependent on it is Demetrius portrayed as an intellectual figure at court and associated with the Library.¹¹⁹ Demetrius certainly was active intellectually while in Alexandria, probably composing several of his works during this time,¹²⁰ and Pfeiffer, Fraser and Blum believe that, despite the silence of the sources, Demetrius did influence Soter's cultural policies.¹²¹ There is no reason *a priori* to reject this hypothesis, but the majority of the sources suggest that his career is not a case of intellectual patronage parallel to that of someone like Apollonius of Rhodes.

¹¹⁷ Diog. Laert. 5.78–9.

¹¹⁸ Pfeiffer 1968: 96. The only anecdote where Soter and Demetrius approach intellectual topics comes from Plutarch's *Apophthegmata*, and here too the intellectual is subordinated to the political: Demetrius encourages Ptolemy to read books on kingship and leadership as a substitute for the advice that 'friends' are afraid to give to rulers (Plut. *Mor.* 189d).

¹¹⁹ The link between Demetrius and the Library appears first in the *Letter of Aristeas*, to be picked up by Christian authors (*Ar.* 9–11; Tert. *Apol.* 18.5; Sync. 327; Tzetz. *Proleg.* Proemium II.4–12). Demetrius' involvement in the acquisition/translation of Jewish writings under Ptolemy is a theme in Josephus, Tertullian, Clement of Alexandria, Eusebius and Syncellus – cf. Fortenbaugh and Schütrumpf 2000: 109–27. Josephus is clearly dependent on *Aristeas* here, and many of the later writers may also go back to this source.

¹²⁰ Gottschalk 2000: 376.

¹²¹ Pfeiffer 1968: 96–104; Fraser 1972 I: 306–7; Blum 1991: 100.

If the case of Demetrius were an isolated example, it would be important as a methodological warning about the nature of our sources and the level of credulity with which they are sometimes treated, but would not have wider historiographical repercussions. But Demetrius is not the only one. On close inspection, the relationships between kings and several other Greek intellectual figures turn out to be similar.

One is Hieronymus of Cardia, *philos* of his fellow-citizen Eumenes of Cardia, who later served as commander under Antigonos Monophthalmos and Antigonos Gonatas. Hieronymus wrote a lost history of the diadochi, known to us through excerpts by Diodorus and Plutarch. Jacoby speculated that he might originally have been a *grammateus*, but there is no hint of this in the surviving sources, which frame his relationships with the kings in primarily military and diplomatic terms.¹²² Although Diodorus persistently refers to Hieronymus as ‘the one who wrote/composed histories’, this is an identifier for the reader, not indicative of Hieronymus’ functions at court.¹²³ Every time we find him interacting with kings in Diodorus’ account it is in a political context: dispatched on an embassy to Antipater by Eumenes; sent for and courted by Antigonos Monophthalmos; captured by Antigonos after Eumenes’ death; put in charge of a bitumen-collection mission by Gonatas.¹²⁴ Similarly, Plutarch mentions him in his *Life of Demetrius* as royally appointed polemarch of Thespieae.¹²⁵

Regarding Hieronymus’ later career and the circumstances in which he composed his *Histories*, we are reduced to speculation.¹²⁶ There is, however, nothing substantial to place

¹²² Jacoby 1913: 1541; Brown 1947: 689; Hornblower 1981: 10.

¹²³ The phrase ὁ τὰς ἱστορίας γεγραφώς *vel sim.* always serves to identify Hieronymus rather than bearing any relevance to the immediate context, e.g. ὁ Εὐμενῆς πρὸς τὸν Ἀντίπατρον πρεσβευτὰς ἀπέστειλε περὶ τῶν ὁμολογιῶν, ὧν ἦν ἡγούμενος Ἑρώωνυμος ὁ τὰς τῶν διαδόχων ἱστορίας γεγραφώς (18.42.1); ἀνήχθη δ’ ἐν τοῖς τραυματίαις αἰχμάλωτος καὶ ὁ τὰς ἱστορίας συνταξάμενος Ἑρώωνυμος ὁ Καρδιανός (19.44.3).

¹²⁴ Diod. Sic. 18.42.1, 50.4; 19.44.3, 100.1–3. Hieronymus may have been Eumenes’ nephew (Brown 1947: 684 n.4; Hornblower 1981: 8); at all events, the ties between the two seem to have been primarily social and political.

¹²⁵ Plut. *Demetr.* 39.

¹²⁶ The work must have been completed after the death of Pyrrhus in 272, but this could reflect a long process of composition: Hornblower 1981: 174–5.

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him among Antigonus Gonatas' circle of intellectuals at Pella; *pace* Jacoby, an ambiguous phrase in *Vita Arati* 3 that Gonatas wrote 'to' Hieronymus or 'about' him is insufficient to reconstruct a royal invitation.¹²⁷ The varying judgements of modern historians about Hieronymus' attitude towards Gonatas and the Antigonid regime only serve to highlight further the fragile and ambiguous nature of the evidence on which they are based: a handful of explicitly attributed fragments, further inferences from Diodorus' account, and Pausanias' accusation that Hieronymus was unduly favourable towards Gonatas.¹²⁸ In the absence of further evidence, it is impossible to say whether or not Hieronymus was part of intellectual court circles, or to what extent his historical writing aimed at or resulted from royal patronage. An additional complication is that Hieronymus himself is probably the ultimate source of all the surviving material about him, and so the possibility arises that he chose to present himself as a man of action rather than a 'secretary' who graduated to higher things.¹²⁹ Nonetheless, even allowing for a certain amount of later recasting, it seems clear that Hieronymus entered the circles of Eumenes and the Antigonids, and was utilised by all of them, mainly for his practical abilities in the diplomatic and administrative spheres.

Other individuals also fit this paradigm. Euhemerus, named by Diodorus as a *philos* of Cassander, may have supported the dynast ideologically through his utopian writing, but only after an active career of serving him in a diplomatic capacity, while the comic poet Philippides, *philos* of Lysimachus, was important as

¹²⁷ *Vit. Arat.* 3.15.25–6: ὡς αὐτὸς φησιν ὁ Ἀντίγονος ἐν τοῖς πρὸς Ἰερώνυμον, οἱ ἐν τοῖς περὶ Ἰερώνυμον. Even if πρὸς is the correct reading and reflects an invitation, we would still have no evidence that Hieronymus accepted.

¹²⁸ Paus. 1.9.8. Brown (1947: 695) seems sure that Hieronymus wrote for Gonatas: 'the policy of the one and the history of the other are inextricably bound together'; Hornblower (1981: 165–79) persuasively questions Brown's view, but accepts that Hieronymus was an apologist for Eumenes. Although Hornblower demonstrates that Diodorus repeated his sources' judgements and attitudes, Diodorus' selectivity and the fact that he does not echo language and style make it hazardous to use him to reconstruct Hieronymus' position on key issues.

¹²⁹ On Hieronymus as Diodorus' main source in Books 18–20, see Hornblower 1981: 18–75; Bosworth 1983. Hornblower (1981: 40) suggests that Hieronymus' references to himself may have been a device to guarantee the reliability of his account; this would also partly explain why he appears as diplomat and trusted commander.

a political mediator between the king and Athens.¹³⁰ Moving east, Megasthenes and Patrocles are Seleucid analogues: individuals utilised by Seleucus I in a political and perhaps also commercial capacity. Paul Kosmin and Marijn Visscher have neatly demonstrated how their geographical and ethnographic works provided ideological support for Seleucid territorial ambitions and naturalised the empire's eastern borders.¹³¹ Yet this is no guarantee that these works were royally commissioned; like Hieronymus, Patrocles and Megasthenes were first and foremost political and military agents, not court scholars. Hegesianax is a similar case. He may have pleased Antiochus III with his poetry, but he also played an important political role at court: he participated in at least two embassies to Rome during the increasingly tense years of the early second century, and was present in 196 at the confrontation between Antiochus III and the Roman envoys at Lysimacheia where Rome first demanded that Antiochus withdraw from the territories west of the Taurus.¹³² Indeed, the context for Hegesianax's poetic recitation in Athenaeus is his refusal to join in an armoured dance with the king and his soldiers after dinner, suggesting that he was present at court in a military or diplomatic capacity before Antiochus discovered his artistic talents.¹³³

Even the career of Callimachus, who perhaps most epitomises the learned Alexandrian scholar, can be viewed in politicised terms. Piecing together the epigraphic and literary testimonia, Alan Cameron has persuasively argued that, far from being a penniless schoolteacher who was talent-spotted in Alexandria, Callimachus came from a prominent aristocratic family in Cyrene, a key Ptolemaic possession, and was probably associated with the court from a young age.¹³⁴ If so, his presence there and in the Muses' birdcage cannot have been without political resonances. Cameron even speculates that Philadelphus may have used him as an envoy to Cyrene during the period of hostilities with Magas.¹³⁵

¹³⁰ Euhemerus: Diod. Sic. 6.1.4; Rose and Hornblower 2012 (rightly cautious on the ideological front); Philippides: *IG* II² 657.

¹³¹ Kosmin 2014b: chs. 1–2; Visscher 2016: ch. 1.

¹³² Embassies: Polyb. 18.47 (196 BC); Livy 34.57.6 (193 BC). Lysimacheia: Polyb. 18.50.

¹³³ Ath. 4.155b. ¹³⁴ Cameron 1995: ch. 1. ¹³⁵ Cameron 1995: 11.

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What, if anything, does re-analysing these particular cases add to our historical understanding? The elision between the political and intellectual spheres which resulted from the high social status of many Greek ‘intellectuals’ has been noted many times before, and a few exceptions do not change the undeniable fact that Hellenistic kings were interested in Greek intellectuals *qua* intellectuals. Making distinctions about the ways in which specific figures related to specific kings matters, however, because it gives a clearer picture of both the motives and actions of individuals and, more broadly, the developing and multifaceted relationships between kings and Greek intellectual figures during the Hellenistic period.

It is probably not a coincidence, for instance, that the politicised examples above are all early Hellenistic. Demetrius, Hieronymus, Euhemerus and the others first entered the circles of the diadochs before the formation of the dynasties and their courts, during the chaotic and war-torn decades between Alexander’s death and the Battle of Corupedium. Although advice on cultural policy and intellectual legitimisation may not have gone amiss, when the successors were fighting over Alexander’s fragmenting empire they arguably had more immediate need of men gifted in politics and diplomacy than in poetry or *diorthosis*. It is therefore unsurprising that they seem to have cultivated these learned members of the Greek elite in a primarily political capacity. Once the courts have formed we begin to see clearer cases of intellectual patronage; the situation is particularly unambiguous when it is institutionalised, or when we are dealing with people who were apparently of no political prominence in themselves, such as Apollonius of Rhodes or Eratosthenes. Unpicking these particular relationships, then, enables us to construct a more differentiated narrative about Hellenistic rulers’ relations with Greek elites, and Greek culture more generally. Applying similar scrutiny to the rest of our sources for Hellenistic rulers’ patronage of Greek intellectual figures affords reason to modify that narrative further.

5.4.2 *Scholarship for Politics: a Tale of Four Dynasties*

Although, as we have seen, there is evidence from all the Hellenistic dynasties for royal interest in Greek intellectuals,

a comprehensive and critical examination of the sources suggests that this interest was uneven across the dynasties and through time. In particular, the lack of evidence for the Seleucids and Antigonids raises the question of whether we can make statements on the dynastic level at all.

The Antigonids look especially shaky. The relationship between Hieronymus of Cardia and Antigonus Monophthalmos can be re-analysed in political and military terms, as can the situation of Prytanis of Carystus, who was asked by Antigonus Doson to draft a law code for Megalopolis and acted as ambassador for Athens to Doson, for which he received an honorific decree from the Athenians in 226 BC.¹³⁶ Antigonus Gonatas is then the only Antigonid ruler for whom there is significant evidence of interest in Greek intellectual culture; Tarn certainly regarded the flourishing intellectual circles at his court as atypical for the dynasty.¹³⁷ Antigonid interest in Greek intellectual culture in the surviving sources thus boils down to a single king with philosophical leanings.

The Seleucids do not fare much better. The cases we have examined – Megasthenes and Patrocles under Seleucus I, Aratus at the court of Antiochus I, the historians and poets associated with Antiochus III, and the philosophers at the court of Alexander Balas – represent almost all the surviving examples. The fact that the *Suda*’s statement about Euphron of Chalcis has been used to support the idea of a Museum and royal library in Antioch comparable to that of Alexandria (despite the careful qualifier of ‘public’ in the source) illustrates the desperate state of the evidence. Of these cases, we have already seen that Megasthenes and Patrocles are problematic, while Alexander Balas was a usurper, and may not have followed usual dynastic policy. This leaves us with only two Seleucid kings, Antiochus I and III, for whom there is significant evidence for patronage of Greek scholars and scholarship at court.

Moving to the two dynasties most active in the Hellenistic ‘culture wars’, it is undeniable that the Ptolemies and Attalids invested more heavily in Greek intellectual culture. Yet even their

¹³⁶ Polyb. 5.93.8; *ISE* 28. ¹³⁷ Tarn 1913: 225.

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records are less consistent than initial impressions suggest. The evidence for the early Ptolemaic kings is abundant: Soter, Philadelphus and Euergetes all employed Greek scholars as royal tutors, and there are numerous anecdotes about the kings hosting and interacting with them at court. Beyond this, however, the sources begin to tail off; royal invitations and tutors take us as far as the childhood of Ptolemy VI (r. 180–145), and institutional patronage continued through the Museum and Library, but it seems that, as Fraser concluded, ‘royal patronage of individuals in Alexandria was essentially a phenomenon of the third century’.¹³⁸ The shorter timespan of the Attalid dynasty makes it harder to see clear patterns, but although there are indications of intellectual investment throughout the dynasty, the majority of evidence for direct patronage of individuals in Pergamon clusters, as we have seen, around the early kings, especially Eumenes II (197–159 BC).

Even allowing for the uneven preservation of the sources, royal investment in Greek scholarship seems much less ubiquitous than the totality of the evidence initially suggests. There are two ways of interpreting this more differentiated, and uneven, picture. The first is to emphasise the inter-dynastic disparities, classify intellectual patronage as essentially a Ptolemaic and Attalid phenomenon, and ask why the Seleucids and Antigonids did not, on the whole, follow suit. Historians have long speculated about whether the apparent lack of Seleucid interest in *belles lettres* reflects a lack of sources or a genuine characteristic of the dynasty. During the twentieth century opinion tended towards the latter: Elias Bickerman, for instance, questioned whether ‘les lettres et les arts exerçaient un attrait sur cette dynastie’.¹³⁹ In recent years, however, there has been a move to reposition the Seleucids as purveyors of *paideia* and patrons of the arts. Andrea Primo, Paul Kosmin and Marijn Visscher have argued strongly for a significant degree of intellectual patronage at the Seleucid court, although these reconstructions tend to depend heavily on very late sources (primarily the *Suda*) and/or taking the fact that an author wrote on Seleucid themes as evidence for a connection with the court.¹⁴⁰

¹³⁸ Fraser 1972 I: 312. ¹³⁹ Bickerman 1938: 39–40.

¹⁴⁰ Primo 2009; Kosmin 2014b; Visscher 2016.

One telling factor here, as observed by Tarn, is the apparent tendency of Greek intellectuals from the East to migrate to the old Greek cities rather than the Seleucid court, which may indicate that the latter was not fertile ground for their activity.¹⁴¹ As Tarn himself notes, the number of attested figures associated with Seleucia on Tigris suggests that Greek intellectual culture thrived there and raises the possibility of royal patronage in the eastern capital, but it is significant that the sources do not make a direct link with the court. On balance we may cautiously suggest that the surviving tradition reflects a real characteristic, and that Seleucid patronage of Greek scholars was sporadic and restricted to a few individual kings. The reason for this remains open to speculation. Edwyn Bevan's suggestion that due to their frequent wars the Seleucid kings 'had less scope to show their Hellenic quality than Ptolemies and Attalids' is not very convincing, since all dynasties were frequently involved in military action. Somewhat more persuasive *a priori* is the thesis that the peripatetic nature of Seleucid kingship hindered the formation of a stable court environment similar to that in Alexandria.¹⁴² Yet this sits uneasily with the reality that the empire was multipolar rather than entirely decentred (Antioch was a stable court centre for most of the dynasty's history) and the fact that the majority of the evidence for Seleucid court patronage comes from one of the most 'peripatetic' Seleucid kings, Antiochus III. Perhaps we are simply dealing with a deliberate difference in royal style.

Neither military duress nor wandering kingship would account for the poor showing of the Antigonids, who had a single, stable court and were no more frequently at war than any of the other dynasties. If this too is not simply a result of what has survived, another possibility is deliberate choice. Did the Antigonids feel less inclined, or perhaps less obliged to engage with this aspect of Greek culture? As a Macedonian dynasty ruling over Macedonians and Greeks, they did not face the charge of 'orientalisation' which could be levelled at the other dynasties. The primary ideological battle they needed to win in the Greek world was over autocracy versus autonomy, finding ways to

¹⁴¹ Tarn 1966: 40–2.

¹⁴² E.g. Bevan 1902 II: 273; Strootman 2010: 30.

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present their *de facto* grip on the Greek poleis as compatible with the cherished ideals of freedom and autarchy which were central to those cities' conceptions of their identity. Although the taint of northern barbarism perhaps never quite left the Antigonids, they did not need to 'prove' their Hellenic qualities to the same extent as the Ptolemies with their uraeus crowns, the Seleucids who, one might say, were practically the descendants of the Persians, or the Attalids who had come out of nowhere to rule an upstart kingdom in the rump of the Seleucid empire. Their lack of conspicuous investment in Greek intellectual culture may be symptomatic of a lesser need to enact their Hellenic identity on the international stage.

Looking at Greek intellectual patronage as part of a necessary performance of *paideia* brings us to the second way of interpreting the uneven record of patronage in our surviving sources. Rather than isolating the Seleucids and Antigonids, we can alternatively detect a chronological, or perhaps better, structural pattern in the behaviour of all four dynasties. In all cases, the majority of examples for intellectual patronage come from the early years of the dynasty – not the first generation, which was marked more by political and diplomatic activity, but the second, after the first succession. Ptolemy II, Antigonos II, Antiochos I and Eumenes II, the kings around whom the highest number of examples of patronage cluster, were all second rulers of their dynasties; the first three were also contemporaries. The fact that the early third century was the golden age of patronage in Alexandria has been observed before, and connected with the strength of the dynasty; Rolf Strootman links it to the economic stability of these years, while Fraser suggested that the decline in intellectual patronage after the end of the third century was related to dynastic decline, and the increasing pressure the Ptolemies faced from Rome.¹⁴³ This may well be the case, but the occurrence of the same pattern with the other dynasties, especially the Attalids, where it is structurally rather than chronologically contiguous, also opens up a different perspective. The competitive patronage of leading Greek intellectuals can be viewed as characteristic of an early

¹⁴³ Fraser 1972 I: 312, 317–18; Strootman 2007: 190.

phase of cultural legitimisation. All the dynasties, having gained military supremacy over certain territories, now needed to establish their Hellenic credentials, partly to serve the appropriation of Alexander's legacy by which they legitimised their claims to kingship, and partly to make themselves acceptable hegemon to the Greek elites who were crucial to their imperial projects.¹⁴⁴

This model also helps to account for variation between the dynasties. The Antigonids, as we have seen, may have felt less pressure on the Hellenic front because of their position in Greece. If the impression we have of the Seleucids is not a result of missing sources or peripatetic kingship, then perhaps the same factor was at work here for opposite reasons: the bulk of the Seleucid empire covered the Near East, necessitating the recruitment of a range of local elites rather than a focus on the Greek world.¹⁴⁵ Moreover, insofar as they did play to a Greek audience the Seleucids may have chosen to emphasise other aspects of their kingship and imperial domain, such as the 'world empire' which could establish them as Alexander's heirs through conquest and exploration, or the wealth and commercial opportunities of Asia, now firmly in Seleucid hands and accessible to enterprising merchants and settlers.¹⁴⁶ By contrast, the Ptolemies' need for Greek fighters and administrators, and the fact that from the first they embraced a dual identity as kings and Pharaohs, made it crucial to stress their investment in Greek culture. Similarly, the Attalids, seeking political support in Greece and in greater need of legitimisation as a parvenu dynasty with dubious origins, had to work harder to present themselves as culturally acceptable to a Greek audience.

¹⁴⁴ Cf. Gruen 2017: 295–6 on patronage of intellectual activity in particular as a key means by which the diadochi could show themselves to be worthy heirs to Alexander and gain legitimacy, although he emphasises this investment by the first generation of each dynasty rather than the second.

¹⁴⁵ We may also note here that the Seleucid ruler whose investment in Greek intellectual culture is best attested is the same one who is most closely connected with Babylonian scholarship: Antiochus I. Perhaps, then, the position of Greek and Babylonian scholarship in the Seleucid empire was not so different after all.

¹⁴⁶ Visscher argues persuasively that the prominence of both elements in Patrocles' 'imaginative geography' of Asia and the way in which Demodamas positions the Seleucids as exceeding the borders of earlier world conquerors reflect early Seleucid royal ideology (Visscher 2016: 40–58).

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This is not to suggest that the royal libraries of Alexandria or Pergamon can simply be reduced to an intermediate stage in the evolution of Hellenistic kingship. Hellenistic kings' investment in Greek scholarship certainly extended beyond what was required to claim 'Greek' identity, and the phenomenon is not restricted to the early Hellenistic period. Nor should the personalities of individual kings and the way in which these shaped their dynasties be discounted; as a man who wrote history himself, it is unsurprising that Ptolemy Soter focused on intellectual culture to a greater extent than some of his contemporaries, and inculcated this in his descendants.¹⁴⁷ But highlighting the structural pattern which emerges from the surviving sources enables us to link intellectual patronage not only with Hellenistic royal politics in general, as has long been the case, but with the specific set of political circumstances faced by each dynasty in its early years of formation. Investment in Greek intellectual culture is then no longer a blanket attribute of Hellenistic kingship which happens to be attested with varying frequency, but one of a number of legitimising tools used by rulers with varying intensity due to varying conditions and needs.

In terms of our inquiry into Hellenistic intellectual culture and cross-cultural connections between Greek and Babylonian scholarship, viewing royal patronage of Greek intellectuals as a targeted phenomenon characteristic of particular political circumstances also aligns it more closely with kings' relationships with Babylonian scholars. We no longer have the two extremes with which we began – royal *philologoi* steeped in Greek scholarship versus pragmatic rulers occasionally performing the requisite role for a local Babylonian audience – but kings enacting two types of targeted performance with strong pragmatic elements on both sides. The difference is that the first performance is more intensely exemplified because its audiences consisted not only of local nobles but a diasporic imperial elite spread across the Hellenistic world and concentrated in its hearts: the royal courts.

¹⁴⁷ For the surviving fragments of Ptolemy's history see *FGrHist* 138 ('Ptolemaios Lagu'), with the important critical survey of the modern debate about its scope, aims and date of composition by Roisman 1984.

Overall, Hellenistic kingship proves both a barren and a fertile domain for making cross-cultural connections between Greek and Babylonian intellectual culture. In many ways the results of our comparison are negative. Kings did not create or facilitate a direct channel of cross-cultural contact or influence, nor was their treatment of these two intellectual traditions parallel. There are significant disparities between the ways in which kings interacted with the Greek philosophers and poets they invited to court, and the Babylonian specialists who facilitated their local legitimisation on the ground, although the performance of the substitute king ritual for Alexander and the case of Sudines at Pergamon provide glimpses of a broader reception for Babylonian intellectual culture and possible channels of cross-cultural transmission which may have been less exceptional than they now appear.

And yet examining the Greek and Babylonian cases in parallel is not a fruitless exercise. Taking the view from Babylon in this instance provides a new perspective on the Greek evidence. The fragmentary and partial nature of the cuneiform sources require a level of source criticism which when applied to the Greek sources yields a more nuanced and differentiated picture of Greek intellectual patronage. Exploration of this more differentiated landscape of patronage in turn highlights the pragmatic and specifically politicised elements in Hellenistic rulers' interactions with Greek intellectual figures, drawing them closer to the more openly transactional relationships on the Babylonian side. We should not overstress the similarities and create a false cross-cultural homogeneity to replace the blanket statements about Greek cultural patronage which we have carefully unpicked. But the differences are not as vast as they initially appear, and the ways in which scholars in each culture intersected with their rulers do bring them at times into parallel orbits, if not into perfect alignment.

We may return finally to the episodes involving Antigonos and Antiochos with which we began. On the surface these are, as we have seen, totally different interactions, but they too can be aligned more closely. Although Antigonos' quip about Homer and Agamemnon showcases his learned pretensions, it also unmasks his expectation that Antagoras will commit *his* deeds to verse. If he

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wishes for a wholly positive portrayal, the example of Agamemnon and Homer is perhaps rather unfortunate and adds a layer of irony to the encounter, but the king's explicit mention of encomium exposes the pragmatic transaction behind the rhetoric. Antagoras is not present on campaign to provide diverting and erudite conversation, but to record the glorious moments and immortalise them for an elite Greek audience. In a similar way, the Antiochus Cylinder was designed not to highlight Antiochus' deep personal interest in cuneiform learning, but to stress for the Babylonian elite his commitment to local religion and traditions of kingship. From an overarching perspective, both these intellectual cultures ultimately served the same purpose: testing philosophers over the campfire helped to make the Macedonians sufficiently Greek for the Greeks, just as appealing in Akkadian to the protection of Nabû rendered them sufficiently Babylonian for the Babylonians. In our intellectual history of the Hellenistic world, then, the chapter on royal patronage will need space for both Antagoras of Rhodes and the cuneiform scholars of Borsippa.

NEW HORIZONS: HELLENISTIC INTELLECTUAL
GEOGRAPHIES

Hellenistic kings' interactions with Greek and Babylonian intellectual culture are in many ways dissimilar, yet we have seen that they can be linked in a more fundamental sense. Despite cross-cultural differences in the frequency and modes of contact with the court and its personnel, Greek and Babylonian scholars performed parallel functions for their rulers. They enabled kings to cultivate culturally appropriate images with their various imperial and local elites, helping to foster the chameleonesque quality crucial for rulers of multiethnic states whose continued control depended on those elites' continued co-operation. The identification of these kinds of parallels provides an alternative, or supplementary, model for drawing cross-cultural connections. As well as searching for points of direct contact between Hellenistic Greek and Babylonian scholarship, we can look for features of intellectual life in the two cultures which are similarly 'Hellenistic' in that they were generated or influenced by the particular political and cultural frameworks which Greek and Babylonian scholars shared: Graeco-Macedonian conquest, settlement and rule. These similar features may take the form of identical characteristics, but also include phenomena which are on the surface dissimilar but in fact represent parallel manifestations of or responses to the same set of political and cultural realities.

Of course, the detection of such features is far from being an exact science. The state of the evidence often precludes certainty about whether a given phenomenon is really characteristic of the period, or whether a particular cross-cultural parallel is meaningful; the same trend may arise from different stimuli in different contexts. Yet the contact/influence paradigm is fraught with similar uncertainties: it is often impossible to distinguish influence

from convergent development and to trace the exact channels of cross-cultural transmission. Attempting to track intellectual developments in the ancient world is an inherently perilous enterprise; the structural approach is not necessarily a blunter instrument with which to map the faint contours of long-vanished intellectual landscapes. Indeed, in two senses it is more powerful: first, it facilitates the drawing of cross-cultural connections where evidence for direct contact is lacking, and second, it shifts the focus away from contact between specific cultures and onto the broader question of whether there were overarching characteristics of intellectual life across the Hellenistic world as a whole. For example, as we saw in [Chapter 2](#), the transmission of Babylonian astral science to the Greek world was almost certainly facilitated by intensified contact after the Macedonian conquest, but it was also part of a specific cross-cultural dialogue that long predated Alexander's entrance to Babylon. By contrast, parallel characteristics of intellectual activity in Hellenistic Greece and Babylonia which can be attributed to the political developments of the period are 'Hellenistic' in the deeper sense that they are a direct product of that conquest. As such, they may be part of overarching trends which transcended both Greek and Babylonian contexts and patterned intellectual life from Athens to Ai Khanoum. In these cases, tracing the Greek and Babylonian parallel takes us beyond a single cross-cultural dialogue towards a more ambitious project: writing a holistic intellectual history of the Hellenistic world.

The following two chapters are conceived as initial forays into this kind of intellectual history. Moving gradually beyond relationships of borrowing and influence, they link Greek and Babylonian scholars indirectly, through the ways in which they engaged intellectually with the wider world – across space and through time. [Chapter 7](#) deals with the temporal axis, arguing for parallels between the ways in which Greek and Babylonian scholars of the Hellenistic period used the past to negotiate the imperial present. The current chapter focuses on space, looking outwards at the Hellenistic world through the eyes of contemporary observers: east from the perspective of Greek writers in Athens, and both east and west from that of scholars based in Babylonia, the core of the early Seleucid empire.

The first part of the chapter compares Hellenistic intellectual geographies in Greece and Babylonia. Classicists have tended to emphasise the intellectually transformative effects of Alexander's conquests on Greek geographies, while in Assyriological scholarship stress has been laid on the archaising geographical terms used in Akkadian literary texts of the later first millennium. This can create the impression that Hellenistic Greek intellectuals eagerly embraced the huge influx of new information about the wider world, whereas their Babylonian contemporaries clung stubbornly to archaic and outdated worldviews. As we shall see, there is a meaningful contrast to be drawn here between Greek and cuneiform scholarship, but it is misleading to overemphasise it. Although the geographical articulations of Hellenistic Greek and Akkadian texts show little to no sign of cross-cultural engagement, a consideration of their respective generic conventions and pre-existing intellectual traditions suggests that the gap reflects differing intellectual priorities rather than cultural isolation. The geographies of Berossus and Sudines, Babylonians who deliberately sought to bridge the gap, provide important, albeit restricted, evidence for cross-cultural engagement by certain Babylonian scholars.

The second half of the chapter moves beyond the search for influence to a more structural comparison. It draws an indirect connection between mainstream Greek and cuneiform scholarship – the zoological and botanical works of Aristotle and Theophrastus on the one hand, and the Astronomical Diaries and Chronicles from Babylon on the other – by showing that these scholarly traditions underwent similar shifts in response to the Macedonian conquest and settlement of the Near East. In this case, it is intellectual change itself that is particularly 'Hellenistic'.

6.1 Intellectual Geographies in Hellenistic Greek and Akkadian Texts

6.1.1 Worlds Apart

Geography, taken in a broad sense to include representations of peoples and places across all media, is a fruitful domain for investigating cross-cultural connections. All societies express

6.1 Intellectual Geographies

ideas about their physical and social surroundings, and the geographical representations of a society reflect its relations with the outside world, revealing various groups' perceptions of and connections with other places and peoples. Shared toponyms or elements of conceptual geography may reveal cross-cultural borrowing; ideologically potent naming or renaming of regions can act as a guide to shifting political relationships. Intellectual geographies are often sensitive to political or cultural change, making geographical representations particularly useful indices of shifting intellectual engagement with external regions and peoples.¹

The long history of contacts between Greece and Mesopotamia means that in order to posit a specifically Hellenistic link one would need to demonstrate that any shared geography postdated the Macedonian conquest. This rules out earlier potential borrowings such as the Babylonian elements detected in Anaximander's cosmology; the possible derivation of Thales' idea that the Earth rests on water from the Mesopotamian concept of the Apsû, the subterranean waters; or the appearance of a central landmass with circumnavigant ocean in both Greek and cuneiform sources (itself too generic a similarity to be conclusive proof of influence).² But in any case there is little sign of shared 'Hellenistic geographies'. Greek philosophical and geographical texts of the Hellenistic period display no explicit engagement with Babylonian ideas about world structure, and the Akkadian material shows no sign of reciprocal conceptual borrowing. It is impossible to make an entirely confident pronouncement on this point: much Hellenistic

¹ The literature on geography and conquest in various historical contexts is vast. Nicolet 1991 and Clarke 1999 explore the geographies of Roman imperialism; Villard 1999 and Tadmor 1999 are comparable studies of the expansionist Neo-Assyrian empire. Kosmin 2014b and Visscher 2016 analyse the works of Megasthenes, Demodamas and Patrocles as imperial literature which helped to articulate a Seleucid imperial space. Villard 1999, Fraser 1972 I: 520–38, Gardiner-Garden 1987 and Romm 1994 discuss the often complex relationship between political conquest and intellectual constructions; Greenblatt 1992 and Grafton, Shelford, and Siraisi 1995, on the discovery of America, provide a thought-provoking parallel from another historical context.

² Anaximander: West 1971: 78, 87, 91–3; Apsû: Kirk, Raven, and Schofield 1983: 92–4 (assigning the origin to Egypt); ocean: Kirk, Raven, and Schofield 1983: 10–17; Horowitz 1998: 41.

Greek geographical writing is lost, much cuneiform material remains unpublished, and the study of Mesopotamian conceptual geography is at a relatively early stage.³ However, the Mesopotamian divisions of the universe into six levels (three heavens and three earths) and of the Earth into ‘four quarters’ were apparently not known to Greek authors.⁴ Nor do the cuneiform sources suggest that Babylonian scholars engaged with the various models of cosmic or terrestrial structure espoused by Greek philosophers.⁵

There is a similar disconnect in the naming and structuring of the known world, no shared toponymic repertoire developed beyond that necessitated by imperial administration. The royal (re)foundations of Alexander and his successors are mentioned in cuneiform texts from the Hellenistic period, but otherwise the surviving sources in both Greek and Akkadian suggest little to no cross-cultural engagement in geographical terms.⁶ For example, although Theophrastus’ botanical works offer detailed information on Mesopotamian flora that was not previously known to Greek authors, his geography of Babylonia is essentially identical to that of fifth and fourth century Greek writers.⁷ While his work reflects the greater opportunities for Greeks and Macedonians to

³ Aspects of Mesopotamian conceptual geography have received treatment in various studies, e.g. Michalowski 1986 and 2010 (third millennium); Liverani 1990: 33ff (Mesopotamian and Egyptian worldviews); Joannès 1997 (views of the west); Milano *et al.* 1999 (a range of aspects of cultural and historical geography across different regions and periods); Rollinger 2001 and Kuhrt 2002b (Greeks and Greece). The only overarching study to date, Horowitz 1998, is by its own account more of a ‘data-base’ (xiv) than a synthetic analysis.

⁴ Mesopotamian cosmic structure: Horowitz 1998, esp. chs 10–13. ‘Four quarters’: Liverani 1990: 45–6; Horowitz 1998: 298–9, 324–5; Michalowski 1986; Michalowski 2010 (Glassner 1984 argues instead for a five-part division).

⁵ On Greek models of the universe, see for an overview Furley 1987; Gregory 2016; on the Presocratics, Algra 1999 (general); Kahn 1960 (Anaximander); Rescher 2005: ch. 1 (Anaximander); Curd 2010: ch. 5 (Anaxagoras); for Plato, Vlastos 1975; Johansen 2004; Freeland 2006; for Aristotle, Solmsen 1960; Matthen and Hankinson 1993. On Greek theories regarding the structure of the terrestrial world, see Dueck 2012: 68–90 with bibliography.

⁶ Hellenistic royal cities so far attested in cuneiform are: Antioch on the Orontes, Antioch on the Iṣtar canal, Apamea-Šilhu, Seleucia on the Tigris, Seleucia on the Euphrates, and possibly Seleucia in Pieria (Monerie 2014: 199–200).

⁷ In his *Historia Plantarum* Theophrastus mentions Babylon, Babylonia and the Euphrates, all well known to Greeks already. His other scientific works mention no additional places in Mesopotamia. Both Herodotus and Xenophon have a more differentiated geography of the region (Stevens 2015: 141; Reade 2015).

observe local environments during and after the Macedonian conquest – a point to which we will return below – what it does not indicate is any engagement with contemporary Babylonian toponymy. Nor did other Greek authors make use of the native topographical divisions of Babylon attested in contemporary cuneiform texts: neither Babylon's city quarters nor the Akkadian names for its buildings feature in the descriptions in Greek historians of Alexander or the Seleucids' actions in the city, although their continued use in the Hellenistic period is confirmed by references in the Astronomical Diaries and legal and economic documents.⁸ Even the name of the main temple, Esagila, failed to enter Greek historiography; in the first century BC, Diodorus, like Herodotus two centuries previously, refers to 'the temple of Zeus, whom the Babylonians call . . . Belus'.⁹ This might reflect *interpretatio Graeca* rather than a lack of knowledge, but the general absence of Babylonian toponyms from Greek writings on Babylon is telling.

A reciprocal absence of Greek geographical and ethnic terminology characterises the cuneiform material. In the Hellenistic sources, Greeks from all regions continue to be described as 'Ionians', (*Akk. Yaw(a)nāya*), as they had been since the Neo-Assyrian period.¹⁰ No transliteration of *Hellen* or its derivatives appears in cuneiform, and very few Greek place names are transliterated: only nineteen Greek toponyms appear in first-millennium Akkadian texts.¹¹ Indeed, external regions already known to the Babylonians are regularly referred to by archaic Akkadian toponyms in scholarly cuneiform tablets from the Hellenistic

⁸ George 1992: 1–73, George 1997; Boiy 2004: 58–9.

⁹ Diod. Sic. 2.9.4; Hdt. 1.181. On the cultic topography of Babylon, see George 2013; Boiy 2004: 59–65.

¹⁰ 'Ionians' (*Yawanāya/Yawnāya*) and 'Ionia' (*Yawanu*) occur in Assyrian and Babylonian royal inscriptions and economic documents from the mid-eighth century onwards (often spelled *Iamanāya/Iamannu* since intervocalic m was pronounced as w in Late Babylonian). See Braun 1982 (with important qualifications in Kuhrt 2002a); Zadok 1985: 187–8; Brinkman 1989; Parker 2000; Rollinger 2001; Kuhrt 2002b. These terms do not refer exclusively to Ionians or Greeks and can indicate Asia Minor (Brinkman 1989: 53, 59; Rollinger 2001: 236) or Anatolia (Braun 1982: 3; Kuhrt 2002a). Neo-Babylonian documents attest to 'Ionians' in Babylonia, although the personal names do not seem to be Greek (Braun 1982: 22–3; Brinkman 1989: 58–60; Kuhrt 2002a: 20–1). Hellenistic references to *Yawanāya* are collected in Brinkman 1989: 63–5.

¹¹ Monerie 2014: 199.

period, even where these names were now out of step with contemporary political or ethnic realities. For example, in the Antiochus Cylinder from Borsippa, Antiochus I is said to have moulded bricks for the Esagila and Ezida temples *ina māt Ḫatti*, ‘in the land of Ḫattu’; *Ḫattu* refers to Syria here, but the term originally described the territory of the Hattic and Hittite peoples in the third and second millennia BC.¹²

A similar case of archaism concerns Ptolemaic Egypt, which is referred to in the Hellenistic Chronicles and Astronomical Diaries as both *Miṣir* and *Meluḫḫa*.¹³ In the earlier first millennium, *Miṣir* denoted Egypt and *Meluḫḫa* the kingdom of Kush to the south: Sargon II’s inscriptions recount how the rebel king Yamani of Ashdod fled through *Miṣir* to ‘the border of *Meluḫḫa*’; Sennacherib’s annals describe the kings of ‘*Miṣir* and *Meluḫḫa*’ joining forces against the Assyrians; Esarhaddon’s account of his Egyptian campaign sees him breaking camp in ‘*Miṣir*’ and heading for ‘*Meluḫḫa*’.¹⁴ Not only do the Hellenistic sources abandon the distinction, but *Meluḫḫa* apparently displaces *Miṣir*: the two terms are used interchangeably in the early third century, and after 273 BC *Meluḫḫa* alone is used for the whole of Egypt.¹⁵ This is another striking example of the use of traditional toponyms in scholarly texts rather than the transliteration of contemporary state names.

Even where Hellenistic cuneiform texts do transliterate Greek place names – for new royal foundations or previously unknown regions – efforts were made to naturalise them within the conventions of Akkadian toponymy rather than simply adopting the Greek form of reference. For example, Seleucia on the Tigris is

¹² V R 66 i.10. On the Antiochus Cylinder, see pages 220–3; Kuhrt and Sherwin-White 1991; Erickson 2011; Strootman 2013; Beaulieu 2014; Kosmin 2014a; Stevens 2014.

¹³ *Miṣir*: BCHP 3 obv. i 23 (Perdiccas’ campaign against Ptolemy); AD –273B [XII] rev. 29’–30’ (Ptolemaic retreat in the First Syrian War). *Meluḫḫa*: BCHP 11 (invasion of Ptolemy III’s forces); AD –168A obv. 14’ (Antiochus IV’s victory in Egypt); AD –144 obv. 35–6’ (Demetrius II’s victory in Egypt). On *Meluḫḫa*’s location in Nubia in the first millennium, see Weidner 1952: 7–9; Potts 1982: 284–5.

¹⁴ Sargon II: Fuchs 1994: 220 (ll. 101–103); Frame 1999: 40. Sennacherib: RINAP 3 Senn. 4.43, 45; Esarhaddon: RINAP 4 Esarh. 34 obv. 16’.

¹⁵ Cf. n.13. The chronological distribution makes it tempting to see a shift following Ptolemy II’s victory over the Kushites and expansion into Nubia in the 270s which would have rendered the political distinction between *Miṣir* and *Meluḫḫa* to some extent obsolete. On Ptolemy II’s campaign in Nubia, see Burstein 2008 with bibliography.

often referred to in Akkadian as *Seluku'a ša ina muḫḫi Idiqlat*, 'Seleucia which is on the river Tigris', but while this looks like a translation from the Greek, comparable localising expressions occur in earlier Akkadian texts.¹⁶ More significantly, Akkadian references to Seleucia do not use the riverine localisation consistently or in isolation. The first time Seleucia is attested with a qualifier in a scholarly cuneiform text, in 274 BC, it is not *ša ina muḫḫi Idiqlat*, 'on the Tigris', but *āl šarrūti*, 'city of kingship', the traditional Akkadian epithet for a capital or royal residence; in only one of three attestations on this tablet does *ša ina muḫḫi Idiqlat* follow.¹⁷ In later Hellenistic cuneiform texts, *āl šarrūti*, *ša ina/ana muḫḫi Idiqlat* and, from 181 BC onwards, *ša ana muḫḫi Idiqlat u nār šarri*, 'which is on the Tigris and the king's canal', occur in various combinations. This looks like a choice *not* simply to translate the Greek form of reference.

A more striking case is the Seleucids' western capital, Antioch. Astronomical Diaries and Chronicles refer to the city that Greeks called 'Antioch by Daphne' or 'Antioch on the Orontes' as *Antiukiya ša ana muḫḫi marrati*, literally 'Antioch on the bitter river'. The Akkadian noun *marratu*, derived from *marāru* 'to be bitter', functions as a synonym for *tāmtu* 'sea' in first-millennium texts, and is used for both the Persian Gulf and the Mediterranean, often with the addition of the river determinative.¹⁸ The use of this determinative and the application of the same term to both seas suggest that they were conceptualised as parts of a single body of water, and indeed on the so-called Babylonian World Map – a schematic representation of the world found on a sixth-century

¹⁶ E.g. *Aššur-utēr-ašbat* ... *ša muḫḫi Sagura*, '(Ana)-Aššur-utēr-ašbat ... which is on the river Sagura' (*RIMA* 3 A.o.102.2 ii.36 – Shalmaneser III).

¹⁷ *AD* –273 rev. 31', 35.

¹⁸ *AD* –155A upper edge; *AD* –149A 'rev.' 3'–4'; *AD* –143 C 'flake'; *BCHP* 12 rev. 12'. *marratu*, derived from *marāru* 'to be bitter' (*CAD* M1 s.v. *marratu* (B); Horowitz 1998: 304–5). In Neo-Assyrian texts all but two occurrences refer to the Gulf, with the earliest reference to the Mediterranean over a century later than that to the Gulf (Horowitz 1988: 153; Horowitz 1998: 305). The Mediterranean meaning is common in the Late Babylonian Astronomical Diaries and Chronicles, although the term is still used to refer to the Gulf, e.g. *AD* –137 D 13' (Elamite attack) and probably also *AD* –164 obv. C 14' (Antiochus IV's campaigns – cf. Gera and Horowitz 1997: 244–9; Clancier 2014b: 427–31).

tablet from Sippar – the circular ocean which flows around the central continent is labelled as ^{id}*marratu* (Figure 6.1).¹⁹

Referring to Antioch as ‘on the bitter river’ not only avoids the Greek geographical epithet but ‘incorrectly’ represents the city’s location, or rather, relativizes it within a Babylonian worldview: from a Mesopotamian perspective, Antioch in Syria may well have counted as ‘by the sea’.²⁰ The epithet may also have ideological force given the importance of the ‘bitter river’ as a conceptual boundary ringing the civilised world: the Seleucid capital, and by implication the reach of the empire, was thereby placed at the edge of the world as viewed from Mesopotamia.²¹ Whatever the precise resonances here, Antioch offers further proof that even when Greek toponyms were integrated into the onomastic repertoire of Akkadian scholarly texts, locally meaningful grammatical and semantic elements were favoured.

6.1.2 *Babylonian Archaism, Greek Indifference?*

The only cross-cultural connection to be drawn from this survey initially seems to be the banal observation that political transformations do not necessarily result in conceptual transformations: the Hellenistic Greek and Akkadian sources do not reflect a shared toponymic repertoire or engagement with each other’s geographical traditions. It would be unwise, however, to take the disconnect at face value as indicative of a lack of cross-cultural connections. As we have seen, there were also areas of great permeability between Hellenistic Babylonian and Greek scholarship, as demonstrated by the celestial sciences and the work of Berossus.²² Rather than accept a blanket explanation of Greek (or mutual) disinterest, it is more fruitful to think about selective borrowing and its causes. In the case of geography, the lack of cross-cultural connection is probably determined by the scholarly traditions from which the

¹⁹ On the ‘Babylonian World Map’, see further Horowitz 1988: 153–4, 156; Horowitz 1998: 26–9; 304–5.

²⁰ Cf. Van der Spek’s commentary on *BCHP* 12: www.livius.org/cg-cm/chronicles/bchp-seleucus_iii/seleucus_iii_o2.html.

²¹ On the symbolic importance of the *marratu* and its constituent seas as a world boundary, see further pages 303–4.

²² See Chapters 2 and 3.



Figure 6.1 The Babylonian ‘World Map’ (BM 92687) © Trustees of the British Museum

Hellenistic material derives, or more precisely the differences between them.

Although there is little evidence for cartography, ancient Greek literature and thought of all periods were highly engaged with the physical and political structures of the natural world.²³ Greek

²³ On Greek maps, see Dilke 1998; the various treatments in Talbert 2012 and, more pessimistically, Brodersen 2012.

geography and ethnography arguably began with Homer, while theoretical speculation about the structure of the inhabited world and the lands beyond it goes back at least to the pre-Socratics and formed a significant strand in Greek philosophical writing throughout and beyond the Classical period. Hecataeus of Miletus' work inaugurated a flourishing tradition of hodological writings; Greek historiography from Herodotus onwards typically contains much geographical and ethnographic detail, and with the third century BC and the work of Eratosthenes the discipline of mathematical geography was born.²⁴ Beyond the effort invested in describing the world mathematically, the engagement of Hellenistic Greek writers with the topography, inhabitants, flora and fauna of the *oikoumene* is evident across all genres, from the huge geographical range of the data amassed in Peripatetic treatises about the natural world to the descriptions of exotic landscapes and learned geographical allusions which suffuse the works of Hellenistic poets.²⁵ Our understanding of all this material is aided by a strong tradition of explicit reflection and debate in Greek and Roman historical and geographical works about the state of geographical knowledge and the work of earlier writers.

Sumero-Akkadian scholarship presents almost the inverse situation: various maps and other spatial representations survive, but there was no comparable genre of geographical or ethnographic writing.²⁶ Many references in Sumerian and Akkadian texts afford insight into perceptions of lands beyond the two rivers: poems and narrative compositions mention various foreign places

²⁴ The most up to date surveys of Classical geography are Dueck 2012 and Roller 2015. Of synthetic treatments, Bunbury 1883 remains valuable despite its age; see also Pédech 1976; Prontera 1983; Jacob 1991; Cordano 1992. Van Paassen 1957 examines the development of different traditions of geographical writing; Skempis and Ziogas 2014 explore space in Greek and Roman literature. The collected essays in Prontera 2011 cover many aspects of Greek geography; Romm 1994 and the contributions in Podosinov 2014 treat peripheral regions, while the papers in Raaflaub and Talbert 2010 set Greek and Roman geography and ethnography in a broader cross-cultural perspective. On ethnography, see in particular Hartog 1980; Jacob 1991; Skinner 2012; Almagor and Skinner 2013; Nicolai 2015.

²⁵ On Hellenistic geographical writing, see Fraser 1972 I: 520–53; Geus 2003 with bibliography. On geographical conceptions in Hellenistic poetry, for Apollonius of Rhodes see Pearson 1938; Endsjø 1997; Thalmann 2011; for Posidippus see Bing 2005; for Theocritus see Krevans 1983.

²⁶ On Mesopotamian maps, see Rochberg 2012.

6.1 Intellectual Geographies

and peoples; lexical lists with geographical and topographical content were a staple of cuneiform education and scholarship in all periods, and the royal inscriptions of the Assyrian kings contain sustained descriptions of landscapes and information about the places and peoples they encountered (and, usually, conquered).²⁷ But there is no Sumerian or Akkadian analogue to Greek descriptive or mathematical geography, and the heterogeneity of the cuneiform sources which preserve geographical or ethnographic information presents a real challenge for the study of Mesopotamian intellectual geographies. Nor do Sumerian and Akkadian literary texts typically offer the dense spatial texture often found in Greek literature: as Benjamin Foster observes, ‘the spatial background of Akkadian literature tends to be bare, almost schematic’, utilising basic scene divisions such as ‘city’ and ‘steppe’.²⁸ Moreover, the majority of Akkadian and Sumerian literary compositions (and hence also their spatial settings) revolve around divine beings or figures or events of the remote or mythical past, rather than the contemporary, human world.

When assessing the Akkadian material, it is also important to understand that the geographical archaism of the scholarly texts is deliberate. As Francis Joannès has pointed out, the ‘frozen geographies’ found in Akkadian literary and scholarly compositions from the later first millennium are literary constructs, belied by the up-to-date toponymy of contemporary administrative and economic documents which shows that the inhabitants of Babylonia were perfectly well aware of the broader political geography of their time.²⁹ In some instances, the retention of archaic place names was governed by the need for fidelity to the copied text. One area in which this regularly occurred was education: standard lists of place names in lexical texts were copied for centuries as

²⁷ Horowitz 1998 demonstrates the richness but also the heterogeneity of the surviving geographical material from a range of genres. Lists of lands make up the 21st tablet of the lexical series *Ur₅-ra* = *hubullu* (see further Horowitz 1998: 322–4). A number of first-millennium cuneiform texts deal with the religious topography of major Mesopotamian cities, but their primary purpose is ‘cosmological and theological’ (George 1992: 1). On landscapes and frontiers in the Assyrian royal inscriptions, see for the Middle Assyrian period Garelli 1999; for the Neo-Assyrian period Tadmor 1999; Villard 1999.

²⁸ Foster 2005: 28. ²⁹ Joannès 1997.

school exercises.³⁰ Archaic terminology might also be retained due to the prestige of a particular text, as with the omen series associated with the core scholarly disciplines, where the authority of any given exemplar derived from its claim of fidelity through generations of careful copying to a (notional) original in the distant past associated with the *apkallū* and the god Ea.³¹ For example, the astrological omen series *Enūma Anu Enlil* was copied until the Hellenistic period with no ‘updating’ of the toponyms, even though these corresponded to a schematic political geography from the second millennium BC which was by then long obsolete.³²

At the same time, cuneiform scholars’ explicit re-interpretation of archaic place names as contemporary states in commentaries and other exegetic compositions shows that the disjunction between the world of the text and that outside the temple walls was not lost on later scribes. For example, in an astrological report to Aššurbanipal about an eclipse which according to *Enūma Anu Enlil* portended negative consequences for the land ‘Amurru’ (literally ‘west-land’), one scholar explained the toponym used in the omen series as follows:

Perhaps the scholars can tell the king my lord something about the land of Amurru: the land of Amurru means the land of the Hittites and the land of the Suteans, or alternatively the land of Chaldaea.³³

Amurru, originally the home of the Amorites, is here re-interpreted as a reference to the territory of one of three contemporary peoples: the Hittite empire; the Suteans, a Semitic people from the

³⁰ Veldhuis 2000 (esp. 76–81); Veldhuis 2004: 86–9; Veldhuis 2014. Of course, the educational curriculum was not static: the lands listed in Tablet 21 of the lexical series *Ur₅-ra* = *hubullu* vary between second- and first-millennium exemplars (Horowitz 1998: 322–4).

³¹ Lenzi 2008b: ch. 2.

³² On the geography of *Enūma Anu Enlil* and the way in which countries were correlated with other phenomena in the lunar eclipse omens, see Rochberg-Halton 1988c: ch. 4. Even where textual variants do suggest ‘updating’ of a composition, it is usually impossible to separate the different chronological layers. For instance, the two surviving versions of the *Sargon Geography*, a first-millennium Akkadian text which describes the conquests of Sargon of Akkad (r. 2234–2279 BC), probably contain geographical constructions from two different periods, but these cannot be distinguished in a methodologically sound way (Horowitz 1998: ch. 4).

³³ *SAA* 10 351 obv. 19–23. For further examples in the Neo-Assyrian court correspondence, see Tigay 1984: 184–5.

Levant, and the Chaldaeans, another Semitic group from the same region who later settled in Babylonia. The equation of contemporary political formations with the geographical entities of older compositions indicates that the prognostic or ideological associations of these geographical schemata had continued salience; rather than update the scheme, scholars chose to re-interpret the meanings or referents of its components.

The reuse and re-interpretation of archaic toponyms was in part, as Jeffrey Tigay notes, an exegetical strategy to ensure the continued relevance of texts that referred to now obsolete geographical entities.³⁴ But older terms were also reused for their associations beyond the strictly geographical. This helps to explain another singular feature of cuneiform scholarly geographies. Some Akkadian toponyms and ethnics were revived in much later texts, and identified with different geographical entities or ethnic groups; in certain cases they were even moved to different parts of the world. *Meluhḫa*, which as we have seen denoted Nubia in the first millennium, was originally used to refer to India;³⁵ *Gutium* was extended from its original location in the Zagros mountains to cover the whole eastern part of the Persian empire and later that of the Parthians, while *Ḫana* or *Ḫanû* originally denoted a kingdom on the upper Euphrates but is used in Hellenistic Akkadian texts to refer to Greece or Macedon.³⁶ The reason for this revival and transplantation seems to be the connotations these toponyms and ethnics had acquired beyond that of location in space: their resonances of distance, exoticism or

³⁴ Tigay 1984: 184–6.

³⁵ See page 258. The location of *Meluhḫa* in third and second millennium texts was long disputed, with some scholars favouring locations in Arabia (Weidner 1952: 9) or Ethiopia (Kramer 1963: 114, n.11) and others east of Mesopotamia, towards Iran or India (Bibby 1970: 219–22; Gelb 1970; Leemans 1960: 159–65). The latter is more likely given the items associated with *Meluhḫa* in third-millennium texts and the lack of a technologically advanced civilisation in East Africa during this period (Leemans 1960: 162–4). A possible equation between Sanskrit *mleccha* ‘barbarian’ and Sum/Akk *Meluhḫa* may offer linguistic support (Parpola and Parpola 1975). Leemans’ hypothesis regarding the shift from the Indus Valley to Nubia is plausible: after the fall of the Indus civilisation knowledge of the original location of *Meluhḫa* was temporarily lost, and the toponym subsequently became associated with the areas from which the commodities linked with *Meluhḫa* in older texts now came (Leemans 1960: 164).

³⁶ *Gutium*: Hallo 1971; Foster 2012; Zadok 1985: 144. *Ḫana*: Weidner 1952: 6; Kuhrt 2002b: 25–8; Reculeau 2012.

foreignness. For example, *Meluḥḥa* was traditionally at the edge of the world, and a source of rare commodities, so for the Assyrian kings to lay claim to it assimilated them to the great conquerors of the heroic past.³⁷ Other terms had more negative tinges of hostility and barbarism. The Gutians were a nomadic people who conquered southern Mesopotamia in the late third millennium BC, an event which left a negative and lasting historical memory. ‘Gutians’ became paradigmatic outsiders and barbarians in Sumerian and Akkadian literary texts.³⁸ The later reuse of the term for various enemy groups faced by the Neo-Assyrian kings and eventually for the Persian (and later Parthian) heartlands therefore seems ideologically pointed.³⁹

A similar case is Ḫana, originally an enemy kingdom which is mentioned in texts from eighteenth-century Mari and the later Agum-kakrime inscription as a distant land whose inhabitants stole (statues of) Marduk and Šarpanītum, the gods of Babylon.⁴⁰ This negative categorisation fits the usage of both ethnic and toponym in Hellenistic cuneiform texts: as Amélie Kuhrt has shown, ‘Ḫana’ and ‘Ḫanaeans’ are used to refer to Greeks or Macedonians who attack or act unfavourably towards Babylon, suggesting that it is a pejorative term.⁴¹ So, too, the eventual use of *Meluḥḥa* to refer to the whole of Ptolemaic Egypt may reflect resonances the term acquired when it referred to Kush: perhaps the toponym which had once denoted the Assyrians’ main enemy in the region was felt to be appropriate for the state which was now the Seleucids’ main foe.⁴² It is most likely, then, that literary or ideological factors rather than lack of knowledge or awareness governed cuneiform scholars’ apparent ‘failure’ to adopt foreign toponyms or update the geographical terminology of scholarly texts.

³⁷ Tadmor 1999: 59–60. Kuhrt 2002b: 16 also suggests that the use of archaic place names for distant areas on the Babylonian *mappa mundi* conveys a sense that ‘time has stood still there’.

³⁸ Hallo 1971; Hallo 2004; Foster 2012. E.g. *CTN* 4, 5 rev. ii 17.

³⁹ Hallo 1971: 717–18; Machinist 1986: 189; Michalowski 2010: 156–7; Foster 2012.

⁴⁰ Weidner 1952: 6; Kuhrt 2002b: 25–8; Reculeau 2012. ⁴¹ Kuhrt 2002b: 25–8.

⁴² On the relationship between the Neo-Assyrians and the Kushites, see Tadmor 1999: 59–60; Kahn 2004; Kahn 2006.

6.2 Bridging the Gap

Given the disparities between Greek and cuneiform scholarship in the geographical domain, it is hardly surprising that we find little evidence of cross-cultural exchange in Hellenistic Greek and cuneiform texts. Greek scholars creating increasingly detailed models of the shape of the *oikoumene* would find little to utilise in the lexical lists and topographical texts that predominate in Hellenistic cuneiform scholarship, while Babylonian scholars concerned with the ideological resonances or prognostic significance of particular regions would have no use for the precise co-ordinates developed by Greek geographers to describe their location. In other intellectual domains, contact and influence were facilitated by a pre-existing overlap in aims and conceptual frameworks: in the case of astronomy and astrology, for example, a common desire to predict the behaviour of the heavenly bodies and a belief that celestial phenomena carried ominous significance. By contrast, the differences between Babylonian and Greek scholars' conceptions of and approaches to the terrestrial world would be likely to inhibit cross-cultural borrowing.

6.2 Bridging the Gap

The suspicion that this apparent disconnect reflects differing intellectual priorities and generic conventions rather than a lack of contact and mutual knowledge is strengthened by two cases where Babylonian authors deliberately attempted a cross-cultural project: Berossus and Sudines. Even in the fragmentary state in which they are preserved to us, these writers' works display a distinctive geography which engages with both Greek and Babylonian traditions and suggests a knowledge of contemporary Greek writings about the wider world.

6.2.1 *Berossus' Hellenistic Geography*

As with many other aspects of Berossus' work, the fact that it has reached us through so many filters invites caution regarding the interpretation of its geographical vocabulary. It is possible, indeed likely, that later excerptors sometimes altered toponyms for stylistic reasons or to make them more comprehensible for their

audience. This certainly seems to have occurred with proper names: Nebuchadnezzar (Akk. *Nabû-kudurri-ušur*) appears as *Nabouchodonosor* in most of the fragments, but Theophilus of Antioch (ca. 180 AD) explicitly tells us that this is what this king was called ‘by the Hebrews’, and that Berossus called him ‘Abobassaros’.⁴³ As Geert De Breucker notes, the form Abobassaros is corrupt, but Theophilus’ phrasing suggests that Berossus may have used a different form of Nebuchadnezzar’s name, which has been almost entirely supplanted in the textual tradition by the form *Nabouchodonosor* more familiar from the Hebrew sources.⁴⁴ The variation in the surviving textual witnesses between *Chaldaica* and *Babyloniaca* as the title of the work is another sobering reminder of the difficulties involved in reconstructing the *ipsissima verba* of Berossus.⁴⁵ There is also a limit to what can be concluded about the work’s original geographical scope from the places mentioned in what survives, both because of its fragmentary state and because of the disproportionate focus of Jewish and Christian excerptors on places connected with the Bible, especially Babylon and Jerusalem.⁴⁶ If we are willing to relax our scepticism a little, however, the geography of the surviving Berossus fragments offers a suggestive contrast to the lack of cross-cultural engagement detectable in the more ‘mainstream’ Greek and Akkadian material from the Hellenistic period. Greek and Babylonian toponyms are combined by Berossus in a way that suggests both an awareness of contemporary Greek geography and an attempt to introduce and explain places thus far unknown to Greek scholarship.

The fragments of the *Babyloniaca* contain 105 references to 30 places or peoples (Figure 6.2). Of these, almost half (45) are to Babylon or its inhabitants, but the remainder show that Berossus was well acquainted with Greek toponyms, and seems to have deliberately utilised them where possible. In the *Babyloniaca*, the

⁴³ *BNJ* 68o F8d.

⁴⁴ *BNJ* 68o F8d *ad loc.* Contamination with some form of Nabopolassar’s name seems likely, but the suggestion of various editors that we should emend to Nabopolassar here (cf. Marcovich 1995: 136 *ap. crit.*) is less persuasive: it is unlikely that Berossus would attribute the exile to Nabopolassar.

⁴⁵ Cf. Chapter 3, n.1. ⁴⁶ Cf. page 97.



Figure 6.2 Places and peoples mentioned in the *Babyloniaca* fragments

Neo-Assyrian king Sennacherib attacks ‘all of Asia and Egypt’; Nebuchadnezzar deals with the rebellious satrap of ‘Egypt and the regions around Coele Syria and Phoenicia’; Cyrus conquers ‘Egypt, Syria, Phoenicia and Arabia’ and exiles the deposed Babylonian king Nabonidus to ‘Carmania’.⁴⁷ Nor is it only regions beyond Berossus’ homeland which are referred to by their Greek names: in the *Babyloniaca* the two great rivers of Mesopotamia are the ‘Euphrates’ and ‘Tigris’ rather than transliterations of the Akkadian *Purattu* and *Idiqlat*, and when Nineveh is sacked by Nabopolassar Berossus uses the Hellenised form of the city’s name, ‘Ninos’, as opposed to a transliteration of Akkadian *Ninua*.⁴⁸

It was not axiomatic that because Berossus was writing in Greek he should adopt Greek place names rather than transliterating Akkadian terms, particularly for places within Mesopotamia. The fact that he apparently chose to use Greek toponyms and ethnics where these existed on the one hand demonstrates his knowledge of contemporary Greek geographical terms – very contemporary, in the case of ‘Coele Syria’ which was a Hellenistic coinage – and on the other suggests deliberate accommodation to his Greek audience. This would fit with the concessions to Greek readers we have observed elsewhere in the *Babyloniaca*: the philosophical recasting of the Babylonian creation account; the ethnographic descriptions in Book 1; perhaps also the astronomical fragments.⁴⁹ In the case of the overseas exploits of the Neo-Babylonian kings, which as John Dillery observes ‘look rather more like they are happening in the world of the early Hellenistic kingdoms’, the use of contemporary Greek place names may also have a specific ideological purpose.⁵⁰ Dillery argues that the Hellenistic backdrop to Nebuchadnezzar’s activities in Syria is part of Berossus’ reshaping of these events as a revolt parallel to that which Antiochus I faced after the death of his father Seleucus. Together with the Hellenistic-looking *philoi* who support the Babylonian king and the euergetic language used

⁴⁷ Sennacherib: *BNJ* 680 F7a (although here the toponyms precede the direct quotation); Nebuchadnezzar: F8a 135–6; Cyrus: F8a 133; Nabonidus: F9a 153.

⁴⁸ Tigris and Euphrates: *BNJ* 680 F1b (2). Nineveh: F7d. ⁴⁹ Pages 102–7.

⁵⁰ Dillery 2015: 280.

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to describe his adornment of Babylon, the ‘Hellenistic’ geography helps to draw connections between the Neo-Babylonian and Seleucid monarchs, assimilating Babylonia’s new rulers to her greatest former kings.⁵¹

As elsewhere in Berossus’ work, too, the geography of the *Babyloniaca* shows signs of an attempt to correct or refine Greek perceptions. One is that the fragments make a very clear geographical distinction between Assyria and Babylonia. This distinction was regularly blurred by Greek historians before (and indeed after) Berossus’ time: Herodotus, Ctesias and Xenophon, the major Greek authorities on the region before Berossus, all failed to separate the two regions clearly. Just as Berossus criticised Greek historians for thinking that the Assyrian queen Semiramis built Babylon, did he implicitly rectify their failure to differentiate Babylonia from the neighbouring state that was its cultural sibling but also at times its greatest enemy? Another clear separation is made in the fragments between Babylon the city (Βαβυλῶν) and Babylonia the region (Βαβυλωνία); given that Greek writers often used Βαβυλῶν to refer to both, this too may be an implicit correction.⁵²

There are also hints that Berossus sought to add to Greek knowledge of Babylonia. Four Babylonian cities appear in extant Greek literature for the first time in the *Babyloniaca* fragments: Bād-tibira, rendered in Greek as ‘Pautibibla’ (Παυτιβίβλα), Sippar (Σισπάρους/ Σιππάρους), Borsippa (Βορσίππα), and Larak, rendered with preservation of the Sumerian nasal as ‘Larancha’ (Λαράγγχα).⁵³ Strikingly, three of these receive what looks like explanatory glossing, with Berossus explicitly stating that they are cities. Several antediluvian kings are said to come ‘from the city Pautibibla’ (ἐκ Παυτιβίβλων πόλεως); Kronos instructs the flood

⁵¹ Dillery 2015: 271, 280–3. On Hellenistic overtones in Berossus’ portrayal of Neo-Babylonian rulers, see also Kuhrt 1987: 55–6; Dillery 2013; Haubold 2013d: 161–2; Haubold 2016: 93–101.

⁵² Babylon: F1b 1, 3; F2; F4b 15, 17; F7d; F8a 132, 137, 142–3; F11. Babylonia: F1b 4; F8a 137, 138; F9a 150, 153. For Βαβυλῶν used to denote the region of Babylonia, see e. g. Xen. *An.* 7.8.25 (satraps of different regions); Ctesias F14 41 (Artarios satrap of Babylonia); Theophr. *Hist. pl.* 8.6.6 (climates of different regions).

⁵³ Bād-tibira: F3b 7–13, 16; Larak: F3b 13; Sippar: F4b 14, 15, 17 (Eusebius has Σιππ-; Syncellus Σισπ-); Borsippa: F9a 151 (ethnic Βορσιππιηῶν), 152.

hero to bury all writings ‘in the city of the sun, Sippar’ (ἐν πόλει Ἡλίου Σι[σ]πάρους),⁵⁴ and Borsippa is referred to as ‘the city of the Borsippans’ (τὴν Βορσιππηῶν πόλιν) on its first occurrence in the surviving fragments, although this may simply be a periphrasis with πόλις + ethnic for toponym.⁵⁵ Apart from two periphrastic references to Babylon as ‘city of the Babylonians’, none of the other cities mentioned in the fragments, which are all attested in Greek literature before Berossus (Bactra, Jerusalem, Damascus, Ecbatana, Susa, Sardis, Babylon and Nineveh) is explicitly introduced as a city in this way.⁵⁶ The small number of references overall and the fact that most of the cities outside Babylonia are mentioned in a single fragment preserved by Clement of Alexandria (F11a) make it hard to put too much weight on this contrast, but in the glossing of Pautibibla and Sippar at least it is tempting to see Berossus introducing the lesser known cities of Babylonia to his Greek readers.

If the additional notes on the Babylonian cities do represent glosses, their distribution not only shows that Berossus attempted to teach his Greek readers about Babylonian regional geography, but also reinforces the point that he had a good knowledge of contemporary Greek geography (and, if the transliterations are his own, its linguistic conventions: the new Babylonian place names are rendered as neuter plurals on the model of other eastern cities like Bactra and Jerusalem). Although it is hazardous to equate first attestation with earliest usage, the earliest surviving Greek references to Jerusalem and Damascus are in late fourth- or early third-century authors (Theophrastus, Clearchus of Soli and Hecataeus of Abdera), which fits well with these cities’ increased importance and visibility for Greek observers under Persian and Macedonian

⁵⁴ Pautibibla: F3b 11–12 (Abydenus); cf. F3a (Armenian Eusebius). Subsequent references are not glossed in the Greek version (nor is the first reference, which comes from Apollodorus), but ‘the city Pawtibiblon’ appears multiple times in the Armenian version. Sippar: F4b 14 (subsequent references are not glossed).

⁵⁵ F9a 152.

⁵⁶ Bactra, Ecbatana, Damascus, Sardis, Susa: F11; Jerusalem: F8a, 8d; Babylon: see n.52; Nineveh: F7d. The two references to Babylon as ‘city of the Babylonians’, like that to the ‘city of the Borsippans’, are from fragments of Book 2 preserved by Josephus (F8a 136 and F9a 149), whereas the references to Larak and Bād-tibira come from the fragments of Book 1 and are therefore more likely to represent the first mention of these places in the *Babyloniaca*.

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rule.⁵⁷ In combination with his own use of up-to-date Greek geographical terms, Berossus' failure to gloss these cities suggests that he was acquainted not just with the geographical conceptions of earlier Greek historical or philosophical writers, but also with the Greek geography of his own day.

6.2.2 *Sudines, Corrector of Theophrastus?*

The state of our knowledge about Sudines and his work makes the fragments of the *Babyloniaca* seem an embarrassment of riches. Our two meetings with Sudines so far – as an astrological expert and a liver diviner at the second-century Attalid court – represent almost the totality of our testimonia about his life and work, if indeed he is a single individual.⁵⁸ The other references to his writings, all seven of which come from Pliny the Elder's *Natural History*, relate to the physical properties of stones and gems. They may derive from a freestanding work, or from a composition which also contained the astrological material.⁵⁹

Few as they are, these quotations align Sudines with Berossus in terms of both his engagement with Babylonian and Greek intellectual traditions, and the specifically Hellenistic inflection of that engagement. On the Babylonian side, the parallels between Sudines' descriptions of stones and those of the Akkadian text *Abnu Šikinšu* ('The stone whose appearance (is) . . . ') are too precise to be coincidental, as Johannes Haubold has demonstrated.⁶⁰ This suggests that Sudines was drawing directly on *Abnu Šikinšu*, which was still a staple element of cuneiform scholarship in Hellenistic Babylonia.⁶¹ But as Haubold also

⁵⁷ Damascus: Theophr. *Hist. pl.* 3.15.3; Jerusalem: Clearchus F6 18; Hecataeus F 6 18–19, F21 44, 49.

⁵⁸ See pages 57; 232–6.

⁵⁹ Plin. *HN* 9.115, 36.59, 37.25, 37.34, 37.90, 37.114, 37.133. Haubold unpublished argues for a freestanding work on gemstones.

⁶⁰ Haubold unpublished.

⁶¹ Parts of the series are attested among Late Babylonian school texts (Gesche 2001: 146, 215; Schuster-Brandis 2008: 18–19). The series is also mentioned in the so-called *Ašipu's Handbook* – a text which lists core compositions for the discipline of *āšipūtu* and which was certainly still copied as late as the Achaemenid period in Uruk (*SpTU* 5, 231 rev. 4).

shows, there are strong indications that Sudines was at the same time engaging with existing Greek scholarship on stones. One is his statements about provenance. Whereas Greek works on the classification and properties of animals, plants and stones are full of information about their subjects' geographical distribution, cuneiform texts on similar topics are primarily concerned with physical properties and uses and rarely mention provenance. A comparison of a typical entry from *Abnu Šikinšu* with an excerpt from Theophrastus' *On Stones* illustrates the difference in emphasis:

na₄ gar-šú gim u₄-me na-mir^{na4} zálag mu-šú
na₄ [gar]-šú gim izi ki.a^did^{na4} an.za[h] mu-šú]
na₄ gar-šú gim an.za[h]-ma ge₆^{na4} [kut-p]u-ú [mu-šú]

The stone whose appearance is bright like the day: *zālāqu*
('brightness') is its name.

The stone whose [appearance] is like sulphur fire: *anzah[h]* is its name].

The stone whose appearance is like *anzahhu*, but black: [kut]pū [is its name].⁶²

ἡ δὲ γύψος γίνεται πλείστη μὲν ἐν Κύπρῳ καὶ περιφανεστάτη. μικρὸν γὰρ ἀφαιροῦσι τῆς γῆς ὀρύττοντες. ἐν Φοινίκη δὲ καὶ ἐν Συρίᾳ καίοντες τοὺς λίθους ποιοῦσιν. ἔπειτα δ' ἐν Θουρίοις· καὶ γὰρ ἐκεῖ γίνεται πολλή. τρίτη δὲ ἡ περὶ Τυμφαίαν καὶ περὶ Περραιβίαν καὶ κατ' ἄλλους τόπους.

Gypsum occurs most abundantly in Cyprus and is very easy to find there: they only have to dig and remove a little earth. In Phoenicia and Syria they produce it by burning stones, and in Thurii too, since a large quantity is also found there. There is a third type of gypsum which occurs around Tymphaia, Perraibia and other places.⁶³

In *Abnu Šikinšu* toponyms do occur, but only as part of the name of the stone, as in the following example from the section on carnelian (Akk. *sāmtu*): 'The *sāmtu*; it is white-speckled: *sāmtu* of Meluḥḥa is its name'. The text's principal interest is in the stones' identification and classification. The same is true of the Akkadian compositions *Šammu Šikinšu* ('The plant whose appearance (is)') and *Šēru Šikinšu* ('The snake whose appearance (is)'), which have an almost identical structure.⁶⁴ By contrast, three of Pliny's seven

⁶² *Haupttext* 45–47 (Schuster-Brandis 2008: 28, 36). ⁶³ Theophr. *De Lapidibus* 64.

⁶⁴ For the most recent edition and translation of *Šammu Šikinšu*, see Stadholders 2011, Stadholders 2012. On the very poorly attested *Šēru Šikinšu*, see Mirelman 2015.

6.2 Bridging the Gap

quotations of Sudines include provenance information, a departure from Sudines' cuneiform sources which suggests that the Babylonian scholar adapted his material in line with Greek intellectual interests.⁶⁵

The geography of the statements quoted by Pliny also suggests targeted, even polemical, engagement with contemporary Greek scholarship. First, like Berossus, Sudines apparently used Greek toponyms: references to Carmania, Attica, Liguria, and the river Siberos demonstrate his familiarity with Greek geography, even down to the local topography of the Greek mainland.⁶⁶ Furthermore, in each case Sudines' provenance statements also offer a corrective to Greek or Roman traditions. Thus, according to Sudines onyx occurs not just in Arabia, as 'our old authors' (*nostri veteres*) believed, but also in Carmania; the *lyncurium* comes not from the urine of the lynx but from a tree which the Ligurians call 'lynx', and the *nilion* is found not only in India, but also in the river Siberos in Attica (if the *Atticae* of the manuscripts is correct).⁶⁷ As Haubold observes, in the case of onyx it is not clear whether Sudines himself flagged his disagreement with older authors or whether Pliny has highlighted the contrast, but with the *nilion* the phrasing implies that Sudines himself responded to an existing view: 'Sudines says it *also* occurs in the river Siberos' (*Sudines dicit et in Sibero Atticae flumine nasci*).⁶⁸ Even more striking is Sudines' claim about *lyncurium*/lyngurium (Greek λυγγούριον). This seems to be an implicit refutation of Theophrastus' discussion of λυγγούριον in *On Stones*, which takes the stone to be lynx urine and segues from the challenges of digging it up (since the lynxes bury it) to a discussion of Ligurian amber, which must also be dug from the earth.⁶⁹ The correspondence between the two accounts looks too close to be coincidental, and Haubold is persuasive in arguing that Sudines is implicitly correcting

⁶⁵ Plin. *HN* 36.59, 37.34, 37.114; Haubold [unpublished](#).

⁶⁶ This assumes, of course, that the place names in Pliny faithfully reflect the Greek original.

⁶⁷ *HN* 36.59, 37.34, 37.114. All manuscripts transmit *Atticae*, but no Siberos river is known in Attica; Procopius (*Aed.* 5.4) mentions a river Siberis in Galatia, leading some editors to emend to Galatiae, but Miller 1993: 231 n.20 links it with the deme of Sybridai and suggests that both do refer to places in Attica.

⁶⁸ *HN* 37.114; Haubold [unpublished](#). ⁶⁹ Theophr. *De Lapidibus* 28–9; Plin. *HN* 37.34.

Theophrastus by revealing his distinction between *λυγγούριον* and amber, and indeed his whole understanding of the former stone, to be erroneous.⁷⁰

Like Berossus, then, Sudines used geographical statements to correct Greek misconceptions. But he also seems to have gone further than his predecessor. Whereas Berossus corrected Greek misapprehensions about Mesopotamian geography, Sudines corrects the Greeks about their own part of the world, making claims about stones in Greece and the western Mediterranean that contradict the work of earlier Greek authors. Given the tiny number of Sudines fragments and the different interests of Berossus and Sudines' respective excerptors, it is of course possible that the apparent contrast in geographical reach and argumentative thrust is an artefact of later selection. At all events, it is apparent from Sudines' corrective statements about the distribution of gemstones and the intersections between his and Theophrastus' work that, like Berossus, he had access to and actively engaged with contemporary Greek scholarship.

In contrast to the impression of cultural and intellectual isolation which emerges from a direct comparison of the geographical references in Hellenistic Greek and cuneiform texts, the fragments of Berossus and Sudines show that some individuals bridged the gap between Greek and Babylonian geographical traditions. These two Babylonian writers had access to Greek historiographical and scientific works, and they engaged with Greek geography both to accommodate the knowledge and preconceptions of their Greek readers, and to correct them. Berossus and Sudines therefore provide a crucial counterweight to the idea that there was no contact between Greek and Babylonian scholarship in the geographical sphere, offering a glimpse of a very different picture of cross-cultural interaction. Yet the fragmentary state of their work and the fact that they are exceptional within the surviving sources, means that these authors can take us only so far in linking Hellenistic Greek and Babylonian intellectual geographies. We can get further, however, if we compare not the geographical references themselves, but the ways in which they changed over

⁷⁰ Haubold unpublished.

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time within each intellectual tradition. Taking methodological inspiration from Claude Lévi-Strauss' 'différences qui se ressemblent', we will look now not for direct resemblances between Greek and Babylonian intellectual geographies but for 'changes which resemble each other', and, crucially, whose resemblance is a result of shared participation in the same imperial system.⁷¹

6.3 'Hellenistic' Intellectual Change: Aristotle, Theophrastus and the Babylonian Astronomical Diaries

Although the surviving sources yield little evidence for direct contact between Hellenistic Greek and Babylonian geographical traditions, a diachronic analysis reveals parallel changes in intellectual geographies within each cultural context in the decades following the Macedonian conquest. Comparison of the shifting toponymic repertoires of Greek and Akkadian texts from the late fourth to early third centuries BC brings to light symmetrical shifts in the range of places and peoples mentioned and the ways in which they enter the text, suggesting that structurally similar changes in geographical knowledge and representations took place in early Hellenistic Greek and Babylonian scholarship. The incorporation of Athens and Babylon into the same dynastic networks may not have led scholars in each city to engage directly with each other's conceptions of the world, but the changing geographical articulations in Greek and Akkadian texts produced in each centre during the late fourth and early third centuries can be viewed as similar responses to the new political structures and routes of communication that these networks created. In other words, these texts do not share a geographical vocabulary, nor do they reflect a shared geographical conception of what we call the Hellenistic world, but they do reflect the creation and structure of that world in similar ways.

⁷¹ Lévi-Strauss 1962: 111. While Lévi-Strauss used the idea of analogous differences as an explanatory principle to elucidate links between animals and ancestors in totemic thought, it is used here as a heuristic tool, to identify intellectual developments within each culture which constitute 'similar differences' from the local situation in the preceding period.

That the Macedonian conquest and settlement of the Near East had an impact on Greek intellectual geographies is hardly a novel observation. Indeed, the idea that Alexander's campaigns had a transformative impact on Greek knowledge of eastern peoples and places goes back to antiquity, evocatively expressed, for example, in Strabo's image of the conqueror who 'unveiled for us the greater part of Asia'.⁷² Western experiences of colonisation from the fifteenth century onwards, particularly in the Americas, provided further stimulus for scholars to view the Macedonian conquest of the Near East as a watershed in Greek knowledge about eastern regions, although some also stressed the fact that (as with the conquest of the New World) new knowledge did not necessarily displace older conceptions.⁷³

What has not so far been suggested is that comparable changes occurred in Babylonia. This is not surprising, given that cuneiform scholarly texts from the period do not engage with Greek geographical terminology, and often use archaising terms for peoples and places. From this very real feature of the evidence it is tempting to construct a dichotomy between Greek writers who eagerly embraced new knowledge about the East, and cuneiform scholars sequestered in Babylonia's temples copying traditional texts and preserving outdated worldviews in seclusion from the political and cultural changes taking place outside the walls. Yet as we have seen, in Late Babylonian cuneiform texts archaic toponyms were not simply retained out of ignorance, but applied selectively to new regions in a way which implies acute awareness of their contemporary political status vis-à-vis Babylonia. This already speaks against a simplistic contrast between up-to-date Hellenic and fossilised Babylonian geographies, but we can go further. A systematic comparison of the toponymic and ethnic repertoire of selected Greek and Akkadian texts from the early Hellenistic period provides compelling evidence that any such dichotomy is misconceived: the political developments of the late fourth century triggered similar intellectual changes in both contexts.

⁷² Strabo 1.2.1; cf. Plin. *HN* 8.44.

⁷³ E.g. Rostovtzeff 1941: 1040; Fraser 1972 I: 520–7 (but sensitive to the continued existence of various types of writing about the east); Geus 2003: 242–4. On the persistence of older conceptions, see Romm 1994: 93–109.

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The lack of a genre of geographical writing in Akkadian, the recopying of older texts and the deliberate retention of archaic terminology make it difficult to detect changes to Babylonian geographical conceptions in the Hellenistic period. But two types of Akkadian text do deal explicitly with places and peoples of the contemporary world: the Babylonian Chronicles and the Astronomical Diaries. Examples of both genres survive from the early to late first millennium, with the Diaries providing fairly even coverage from the Late Achaemenid period onwards and the Chronicles more sporadically attested.⁷⁴ Together they yield a sufficiently large corpus of places and peoples for a diachronic study over the transitional period between Achaemenid and Seleucid rule. Of course, these texts do not provide a transparent window onto Babylonian geographical knowledge or interests. Apart from their penchant for archaising toponyms, their terrestrial interests are limited, and their fragmentary state of preservation precludes any fine-grained analysis of change, for example from year to year. But they do engage in a consistent way with the wider world, and at a more overarching level – decade to decade, century to century, empire to empire – a diachronic study of the places they mention can be used to trace intellectual change.

Although the impact of the Macedonian conquest on geographical conceptions can be detected impressionistically in many Hellenistic Greek sources, most do not yield a large or stable enough textual corpus to support a diachronic comparison. The geographical writings of Eratosthenes or Hipparchus survive only in later quotations and paraphrases, while the differing generic affiliations and authorial priorities of the various Hellenistic poets and their self-conscious search for innovation make it difficult to extrapolate broader intellectual trends by studying the spatial articulations of Alexandrian poetry. Instead, therefore, I focus here on the geographical references in two scientific texts produced by members of the Peripatos: Aristotle's *Historia Animalium* and Theophrastus' *Historia Plantarum* (henceforth abbreviated to *HA*

⁷⁴ The surviving Chronicles date from the eighth to the third century BC; the Diaries from the sixth to the first century (see Steele 2019 for the sixth century rather than the seventh as the beginning of the Diaries), with relatively consistent coverage from the mid-380s onwards.

and *HP* respectively). Like the Diaries and Chronicles, these works are not directly geographical, and they offer us not a synoptic view of Greek geographical knowledge but a view of the world through particular zoological and botanical filters. However, their strong tendency to localise examples means that each text provides a corpus of geographical references sufficiently large to permit analysis of trends in patterns of reference to different regions and sites.

In addition, the singular intellectual and chronological relationship between *HA* and *HP* and their authors affords a rare opportunity to track intellectual change. Although they focus on different aspects of the natural world, the two *historiae* share similar aims, categories and analytical models.⁷⁵ Most importantly for our purposes, both authors use geographical references for the same purpose: to provide evidence for observed or postulated information or trends. For example, Aristotle specifies the geographical distribution of different crustaceans to support his claims about their preferred habitats: ‘Crayfish are found in rough and rocky places, but lobsters in level places; neither live in muddy places. Hence lobsters are found in the Hellespont and around Thasos, while off Sigeum and Athos crayfish are found’.⁷⁶ Similarly, Theophrastus offers a localised example to illustrate his point about the way in which species adapt to local environments: ‘In some places, if people simply work and disturb the soil, straight away the plants proper to the district shoot up – like the cypresses in Crete’.⁷⁷ These close intellectual affinities make it more likely that differences in the range and type of geographical references between the two works can be attributed to external changes during the decades that separate their completion.⁷⁸

⁷⁵ Gotthelf 1988; Vallance 1988; Stevens 2015: 124–5.

⁷⁶ *HA* 549b13–17. Zoological observations are occasionally used to support geographical hypotheses; cf. Geus 2003: 233 on elephants as ‘evidence’ for a connection between India and the Pillars of Herakles.

⁷⁷ *HP* 3.1.6.

⁷⁸ *HP* has a much higher overall frequency of geographical references than *HA* (Stevens 2015: 128). This probably reflects differences in subject matter (plants are more affected by location than animals, which can move) and intellectual outlook (Aristotle focuses more on form and the final cause; Theophrastus’ less teleological perspective allows more emphasis on environment). However, these differences are unlikely to have skewed the spatial distribution of geographical references: see further Stevens 2015: 124–5, 128–32.

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Those decades indeed brought with them significant external changes, as Alexander's successors consolidated their kingdoms and many Greeks and Macedonians emigrated to the new territories. The absolute *terminus post quem* of Aristotle's death in 322 BC would in theory permit him to have utilised new information about the east following Alexander's conquests, but scholars have long argued, on various grounds, that *HA* was completed earlier. François Nuyens placed the work in Aristotle's 'middle period' (347–335 BC) based on its psychological observations;⁷⁹ Geoffrey Lloyd argued for an early dating by tracing developments in Aristotle's classificatory thinking; crucially, James Romm and Joan Bigwood have demonstrated that none of the biological data in this or Aristotle's other works needs to postdate Alexander.⁸⁰ Based on the high concentration of references to places in the Troad, Desmond Lee also dated *HA* to the 340s or 330s BC, when Aristotle was in Lesbos, although he allowed for later updating and suggested that the references to Asia might reflect 'the influence of Alexander's conquests'.⁸¹ If the early dating is correct, most or all of *HA* was written before information from the Macedonian conquests had filtered back to Greece.

By contrast, *HP* was probably completed at the close of the fourth century or the beginning of the third, well after the return of the first wave of veterans and into the first or second generation of settlement in the Hellenistic East.⁸² We might therefore expect a comparison of the geographies of *HA* and *HP* to reflect their composition at different points in this important transitional period. Indeed, although neither scholar made a direct comparison, Paul Bolchert argued in 1908 that Aristotle's geography of Asia and Libya reflected the state of Greek knowledge before Alexander, while Peter Fraser suggested in 1994 that Theophrastus' 'plant-geography' more than any other early

⁷⁹ Nuyens 1948, although his model of Aristotle's philosophical development has been generally rejected: see Granger 1996: 155–6 with bibliography.

⁸⁰ Lloyd 1961; Romm 1989; Bigwood 1993.

⁸¹ Bolchert 1908; Lee 1948: 64 (the clustering in the Troad was initially remarked on by Thompson 1910).

⁸² On the dating of *HP*, see Amigues 1988–2006 I: xviii–xx; Fraser 1994: 172.

Hellenistic work mirrored ‘the great changes that the world had recently undergone’.⁸³

I have argued in more detail elsewhere that a systematic comparison of geographical references to the east in *HA* and *HP* fully bears out the insights of Bolchert and Fraser: there is a shift in both knowledge and conceptual frameworks, from *HA*’s ‘Herodotean’, exception-filled, eastern landscapes to a series of discrete and analysable regions which are more connected to the Mediterranean world in *HP*.⁸⁴ Here, I aim to highlight a parallel between this development and the trends we see in the Babylonian Chronicles and Diaries. The Greek *historiae* and the Akkadian texts are very different sorts of compositions, with different narrative and geographical textures. Nonetheless, a comparative, diachronic study of the places and peoples mentioned in each set of texts reveals two structurally similar trends, which represent analogous responses to the political and cultural realities of the post-Alexander era. The first is a change in geographical horizons and an increase in engagement with east and west as viewed from Greece and Babylonia respectively. The second is a qualitative shift in the way that foreign places and peoples are introduced and connected. Both, I will argue, render the world of Theophrastus and the Seleucid Diaries and Chronicles ‘Hellenistic’ in a way that is not true of earlier (and later) texts.

6.3.1 *Horizons and Knowledge*

In both Theophrastus’ *HP* and the Hellenistic Diaries there is an extension of the range of places and peoples mentioned relative to their earlier fourth-century antecedents, which reflects the new political geography. The change to the eastern part of the world when the topographic references of *HA* and *HP* are mapped instantly conveys the intellectual effects of Alexander’s campaigns and the first years of Graeco-Macedonian settlement:

⁸³ Bolchert 1908; Fraser 1994. Previous studies of the place names in *HA* and *HP* (Lee 1948, Thanos 2005) aimed primarily at reconstructing biographical information and did not include a comparative element.

⁸⁴ Stevens 2015.

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Theophrastus mentions a much wider range of places in the eastern Mediterranean and Near East than does his predecessor (Figures 6.3 and 6.4).⁸⁵ The most striking changes occur in the Levant, central Asia and Arabia, which are relatively empty expanses in *HA*, but dotted with references in *HP*: the Lebanon mountains, Damascus, Carmania, Gedrosia; settlements along the Arabian peninsula (for all textual references in *HA* and *HP* to places discussed in this and the following sections, see Appendix 1 at the end of the chapter). These areas of increased coverage correspond precisely to regions newly explored and/or conquered by Alexander and the early Hellenistic dynasts. Syria was an area of intense royal interest and conflict in the late fourth century; Carmania and Gedrosia were regions crossed and recrossed by Alexander (with tragic consequences in the latter case) and formed key units of Seleucid administrative geography, while it was under Alexander and his successors that the Greeks became familiar with the Persian Gulf and the spice trade centred on the southern Arabian peninsula.⁸⁶

These changes do not represent a true expansion of horizons; there is little alteration from *HA* to *HP* at the eastern edge of the map, with India retaining the status as an eastern world boundary which it had held at least since Herodotus.⁸⁷ Alexander’s conquests did not cause a conceptual break comparable to that which occurred in European geographies after the discovery of a fourth continent; rather, both he and his successors strove to fit their ‘on the ground’ experience to pre-conceived ideas, sometimes with

⁸⁵ The analysis is based on all geographical references from *HA* 1–9 and *HP* 1–9 (the spurious *HA* 10 contains no toponyms; the dubious *HP* 9 is included due to thematic similarity with the other books and the probability of Theophrastan authorship). In this section, where the simple fact of reference is at issue, toponymic, ethnic and adjectival references are included without distinction; the distribution and effects of different types of reference are considered below. For further details of the approach taken to the selection and classification of references, see Stevens 2015: 128 with nn.15 and 17.

⁸⁶ On Graeco-Roman exploration and exploitation of the Gulf, see in general Paropcharlat and Salles 1981; Bowersock 1986; Potts 1990; on the Seleucid Gulf: Sherwin-White and Roueché 1985; Salles 1987; Kosmin 2013a.

⁸⁷ Hdt. 3.98, 106. That Aristotle placed India at the eastern edge of the *oikoumene* is clear from his statement that the outer ocean is in sight once one crosses the Paropamisus (which he calls Parnassus – Arist. *Mete.* 350a21), his measurement of the breadth of the *oikoumene* from the Pillars of Herakles to India (*Mete.* 362b25), and the reference to these two regions as ‘extremes’ (ἑσχατοί) in the discussion of whether there is a connection between them (Arist. *Cael.* 2 298a11; cf. Bolchert 1908: 7).



Figure 6.3 The eastern Mediterranean and Near East in the *Historia Animalium*



Figure 6.4 The eastern Mediterranean and Near East in the *Historia Plantarum*

ideological implications.⁸⁸ Rather, in Theophrastus' work there is a filling in of previously undifferentiated spaces between the world boundaries. Compared with *HA*, the eastern geography of *HP* signifies an increase in local knowledge, attributable to the extended military campaigning and settlement which took place across the Near East during the early Hellenistic period. As can be seen from [Figure 6.3](#), Aristotle's references to the Near East in *HA* are mainly at the regional level: Phoenicia, Syria, Persia, Media, Bactria, Arachosia, India, Egypt. By contrast, *HP*'s more locally-differentiated geography of these regions is visible from [Figure 6.4](#), with references to the Lebanon and Anti-Lebanon mountains, the rivers Euphrates and Akesines, and the cities of Damascus, Ascalon, Petra, Bactra and Babylon.⁸⁹ Within Egypt, Theophrastus' comparisons of budding patterns in the Delta and Elephantine and his discussion of the aquatic geography of the Red Sea coast take us much further south and east than *HA*, where 'Egypt' really means Lower Egypt: apart from Thebes, the only specific localities mentioned by Aristotle (Pharos and Pelusium) are in the Delta region, and all had been well known to the Greeks for centuries.⁹⁰ There is also more of a sense of local landscapes in *HP*. While Aristotle's eastern fauna inhabit empty and vaguely realised expanses, Theophrastus brings before the reader's eyes localities alive with topographical and botanical detail: a hill near Damascus covered in terebinths; royal palms rising from the park of Bagoas in Babylon; waterlilies bobbing in the Euphrates.⁹¹

The 'Hellenistic' nature of Theophrastus' east also goes beyond a general correspondence between the regions of increased coverage in *HP* and areas newly conquered and settled by Greeks and Macedonians. Most of the places which are new in *HP* compared

⁸⁸ Perhaps the best example is the Caspian Sea, which Alexander and the Seleucid admiral Patrocles 'confirmed' to be a gulf of Ocean, allowing each to claim dominion to the ends of the earth. See further Geus 2003 on Alexander; Kosmin 2014b: 67–76 and Visscher 2016: 42–51 on Patrocles' geography and the ideological work it did for the Seleucids.

⁸⁹ See [Appendix 1](#) at the end of the chapter for references. Βαβυλῶν (Babylon) and Βάκτρα (Bactra) in Greek can refer either to cities or regions; some cases in *HP* are ambiguous, but both usages are attested: *HP* 8.6.6 is a regional climatic comparison, while at 4.4.1 and 8.4.5 the local level of the description suggests that the cities are meant. I follow Schneider's emendation of Susa at *HP* 9.15.8 and 9.16.8 to Lousa.

⁹⁰ See [Appendix 1](#) at the end of the chapter for references.

⁹¹ *HP* 3.15.3; *HP* 2.6.7; *HP* 4.8.10.

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with *HA* have a specific contemporary relevance, and are often mentioned in connection with early Hellenistic politics or military action. Sometimes this is explicit: Theophrastus describes naturally seedless pomegranates near the river Pinaros 'where the battle against Darius occurred'; Antigonos' transactions with the Arabs who brought frankincense to the sea appear in a discussion of the distinguishing features of different aromatic trees, and Harpalus' frustrated attempts to cultivate ivy in Babylon provide evidence for the plant's limited distribution in Asia.⁹² But elsewhere too the actions of Alexander or the diadochs are often in the background. Alexander's Indian campaign is pre-supposed by the statements about the lethal effects of unmixed 'Indian barley' on horses and the javelins made from the 'Indian reeds' (bamboo) by the Akasines river, while behind Theophrastus' accounts of the beautiful terebinths near Damascus, the distribution of ginger-grass in the Lebanon and Anti-Lebanon mountain ranges and the quality of dates in the Beqa'a Valley lies the fact that this region was the centre of the ongoing Ptolemaic-Seleucid tug of war over Coele Syria.⁹³

In comparison, the eastern geography of *HA* looks decidedly pre-Hellenistic. All but two of the places east of Asia Minor mentioned by Aristotle in this text already appear in Herodotus or Ctesias, and most of the zoological data associated with them derives from or otherwise engages with these authors.⁹⁴ Aristotle's accounts of the horned snakes of Thebes, Egyptian hippopotamus and lions in Asia all have Herodotean antecedents, while it is his vehement rejection of Herodotus' views on semen colour that brings Ethiopia into consideration in Book 3.⁹⁵ Meanwhile, despite Aristotle's frequently expressed scepticism about

⁹² *HP* 2.2.7; 9.4.8; 4.4.1.

⁹³ Indian barley: *HP* 4.4.9. Reeds: *HP* 4.11.13. It is possible that the latter is from Ctesias, who is credited with mentioning marvellously wide and strong 'reeds' in India (F1b.17.5 (Diodorus); F45.14 (Photius); F45c (Tzetzes)); however, the Ctesian fragments refer to the Indus, not the Akasines, and discuss the reeds' use in boat-building, not weaponry. Terebinths: *HP* 3.15.3; ginger-grass: 9.7.1; dates in the Beqa'a valley: *HP* 2.6.8.

⁹⁴ The exceptions are Pharos (*HA* 607a14) and Arachosia (*HA* 499a4); cf. Stevens 2015: 138–41.

⁹⁵ Horned snakes: *HA* 500a4, Hdt. 2.75; hippopotamus: *HA* 502a9, Hdt. 2.71; lions: *HA* 606b14–16, Hdt. 7.126; Ethiopians' semen: *HA* 523a17–18; Hdt. 3.101.

Ctesias' credibility, nearly all the data on India in *HA* is Ctesian.⁹⁶ The reports on the martichore (a marvellous beast with a human head, the body of a lion and the tail of a dragon or scorpion), the huge size of Indian animals and the absence of pigs from the country are explicitly attributed to Ctesias, but his work also seems to underlie the passages on the Indian ass and the small snake from India whose venom has no known remedy.⁹⁷ The contrast between *HA* and *HP* in this respect is striking, and provides further confirmation that the later work reflects the transformation in Greek knowledge of the east wrought by Alexander, his successors, and 'the enterprise of Greek-speaking settlers, travellers and merchants' in the early Hellenistic period.⁹⁸

Despite the very different character and fragmentary state of the Babylonian sources, similar changes are detectable between the geographical references in the Astronomical Diaries and Chronicles from the Late Achaemenid period and those from the period of Seleucid rule. It must be stressed as a preliminary point that all these texts engage very selectively with the world beyond Mesopotamia. As noted already by their first editors, the Diaries are highly Babylon-centric:⁹⁹ out of 943 toponymic and ethnic references in the entire corpus, 84 percent (788) deal with places within Mesopotamia, and almost half (423) are to the city or inhabitants of Babylon itself. In the Late Babylonian Chronicles the ratio is similar; out of 210 references, 81 percent (170) are to places within Mesopotamia. Indeed, only twenty-nine distinct places or peoples outside Mesopotamia are mentioned in all the surviving Diaries and Chronicles. This does not reflect the totality of information available to the compilers, but rather their specific interests. Their inclusion of terrestrial events is selective: the Late Babylonian Chronicles focus on royal action and succession, conflict and other disturbances in Babylon, and the affairs of the city's temples, especially Esagila; in the Diaries the vast majority

⁹⁶ Bolchert 1908: 15–19; Geus 2003: 235; Stevens 2015: 138–41. Doubts over Ctesias: *HA* 501a26; 606a8.

⁹⁷ Martichore: *HA* 501a26; huge animals and pigs: *HA* 606a8 (cf. Hdt. 3.106); Indian ass: *HA* 499b20; Ctesias F45 (Photius); snake: *HA* 607a34. The *ophidion* described by Aristotle here is very similar to the tiny but lethal Ctesian snake mentioned by Aelian and Photius (Ctesias F451).

⁹⁸ Fraser 1994: 188. ⁹⁹ Sachs and Hunger 1988: 36.

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of recorded events in the human world fall under the following categories, with differentiated geographical scope:¹⁰⁰

- 1) Within Babylon only: positive or disruptive action in the religious sphere (performance of rituals; sacrilege and capital punishment of offenders).
- 2) In Babylon or Babylonia: unnatural animal births and behaviour; large-scale disruption of human life by disease, famine, war or natural catastrophe; royal communications.
- 3) With apparently unlimited geographical extension: military engagements of Babylonian forces; movements of the king, royal representatives, messages or resources; royal deaths.

Beyond Babylonia, only a restricted range of events involving royal figures or their representatives draw the Diaries' focus, which explains in large part why external regions are so rarely mentioned. The lack of more frequent and detailed reports about these regions need not be attributed to the seclusion of scholars in Babylon (whether involuntary or deliberate); the authors of the Chronicles and Diaries would have had no reason to include information which fell outside their categories of relevance. While those categories of relevance remain consistent throughout the period in which they were written, however, the texts' geographical coverage does not, and the changes can plausibly be linked to external developments. Although the Diaries and Chronicles are very different from the Greek *historiae* in their spatial texture, a diachronic examination of the places they mention outside Babylonia shows that they exhibit parallel shifts in their geographical frame of reference during the late fourth and early third centuries which are similarly reflective of the changing imperial structures on the ground.

Like *HP*, when compared with their pre-Hellenistic antecedents, the Hellenistic Diaries show a clear shift in the range of places and peoples attested, which can be correlated precisely with the altered political geography of their time (all references in Diaries and Chronicles to places and peoples mentioned in this section can be found in [Appendix 2](#) at the end of the chapter).¹⁰¹ A map of the

¹⁰⁰ On the possible reasons behind this geographical patterning in the Diaries, see further Stevens 2019.

¹⁰¹ The Chronicles do not survive with sufficient coverage to permit an independent quantitative analysis, but are included for qualitative support.

geographical references from the Late Achaemenid Diaries (390–331 BC) captures the shape of the late Persian empire, centred on the Iranian plateau but reaching west to the Mediterranean (Figure 6.5). By contrast, the overall map of places mentioned in the early Hellenistic texts (330–270 BC) stretches from Bactria (*Bahtar*) in the east to Macedon (*Ḫana*) in the west – the furthest points of Hellenistic imperialism (Figure 6.6).¹⁰² Although the Chronicles do not survive with sufficiently extensive coverage of the fourth and third centuries to permit a full comparative analysis, the toponymic repertoire of the Hellenistic exemplars parallels that of the Diaries in its expansion to cover the new Macedonian imperial system: the Hellenistic Chronicles feature for the first time the toponyms *Ḫana*, *Makkadunu*, *Bahtar* and, if the reading of the text is correct, *Indu* (India).¹⁰³

In counterpoint to the eastern expansion in *HP*, the Hellenistic Diaries and Chronicles show an increased engagement with western regions, now more closely connected to Mesopotamia than ever before. References to the cities of Sardis and Antioch display a more local (and Seleucid) geography of Asia Minor, and the Greek-speaking world, previously covered by the monolithic *Iaman(n)u* (pronounced ‘Yawannu’) in Akkadian texts, is now differentiated into Ionia proper, and *Ḫana* or *Makkadunu* across the sea. In fact, it is in the Hellenistic period for the first time that the Greek mainland is securely attested in Babylonian scholarly texts.

We cannot infer from these changes a transformation in Babylonian worldviews, any more than we could from Theophrastus’ eastern geography. While *Bahtar* appears in Akkadian scholarly texts for the first time in the Seleucid period, its first attestations in Akkadian sources more generally are

¹⁰² See Appendix 2 at the end of the chapter for references. There is some uncertainty about the precise geographical extension of *Ḫana* in the Hellenistic texts. In the Late Babylonian Chronicles and Diaries the ethnic ‘Hanaean’ is used to refer to Macedonians (and perhaps also Greeks) from various areas, but some of the time *Ḫana* indicates Macedon specifically, as in the dating formula of AD –328 which identifies Alexander as the king from ‘the land of Ḫana’. The Chronicles also use *Makkadunu* which is unambiguous, but *Makkadunu* is not attested in the Diaries, and it seems likely that ‘the land of Ḫana’, *māt Ḫani*, functions as its equivalent.

¹⁰³ See Appendix 2 at the end of the chapter for references. *Indu*: BCHP 7 obv. 14’ (uncertain; *in-du* is preserved before a break).



Figure 6.5 Places and peoples mentioned in Diaries or Chronicles 390–331 BC¹⁰⁴

¹⁰⁴ Italics denote places or other geographical features only attested in Chronicles.



Figure 6.6 Places and peoples mentioned in Diaries or Chronicles 330–270 BC¹⁰⁵

¹⁰⁵ Italics denote places or other geographical features only attested in Chronicles.

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from the Achaemenid period.¹⁰⁶ Similarly, while the appearance of mainland Greece/Macedon in the Hellenistic Diaries constitutes the addition of a new political entity to the west, the Babylonians had been well aware of lands in and beyond the Mediterranean for centuries. Nonetheless, the Diaries show a definite alteration in geographical focus that corresponds to recent political changes. Moreover, as with Theophrastus' reports about eastern plants, the information associated with all these places leaves no doubt about the relationship between the shifting horizons of the Diaries and Chronicles and the broader political context. Indeed, the fact that these texts mention external regions only when reporting events concerning the king or his representatives means that the newly attested foreign places are by default mentioned in connection with contemporary political events: Macedon/Hana as the homeland of the new dynasty and the object of early Seleucid territorial ambitions; Egypt and 'Beyond-the-river' (Akk. *Eber-nāri*), the satrapy west of the Euphrates, in the context of ongoing Ptolemaic/Seleucid wars, and Sardis and Antioch as sites of royal journeys, dynastic infighting and deaths.¹⁰⁷

The shifting pattern of geographical references through the Hellenistic and Parthian periods further supports the impression of a close link between political and intellectual geographies. This is visible in a schematic way from a comparison of geographical references in the early Seleucid, late Seleucid and Parthian Diaries (Figures 6.7–6.9). The changing map of references from the third to the second centuries (Figures 6.7–6.8) mirrors the evolution of the Seleucid state from a trans-Asian empire to an increasingly compact Syrian kingdom. After the Parthian conquest, another shift in the distribution of references reveals a field of interest focused east once more, towards Media, the heartland of Babylonia's latest imperial masters, and Elam, the territory of the nominally subordinate Elymaean dynasty who exercised their independence locally with bloody incursions into Babylonia (Figure 6.9).

¹⁰⁶ Zadok 1985: 62.

¹⁰⁷ See Appendix 2 at the end of the chapter for references.



Figure 6.7 Places and peoples mentioned in Diaries or Chronicles 300–250 BC¹⁰⁸

¹⁰⁸ Italics denote places or other geographical features only attested in Chronicles.

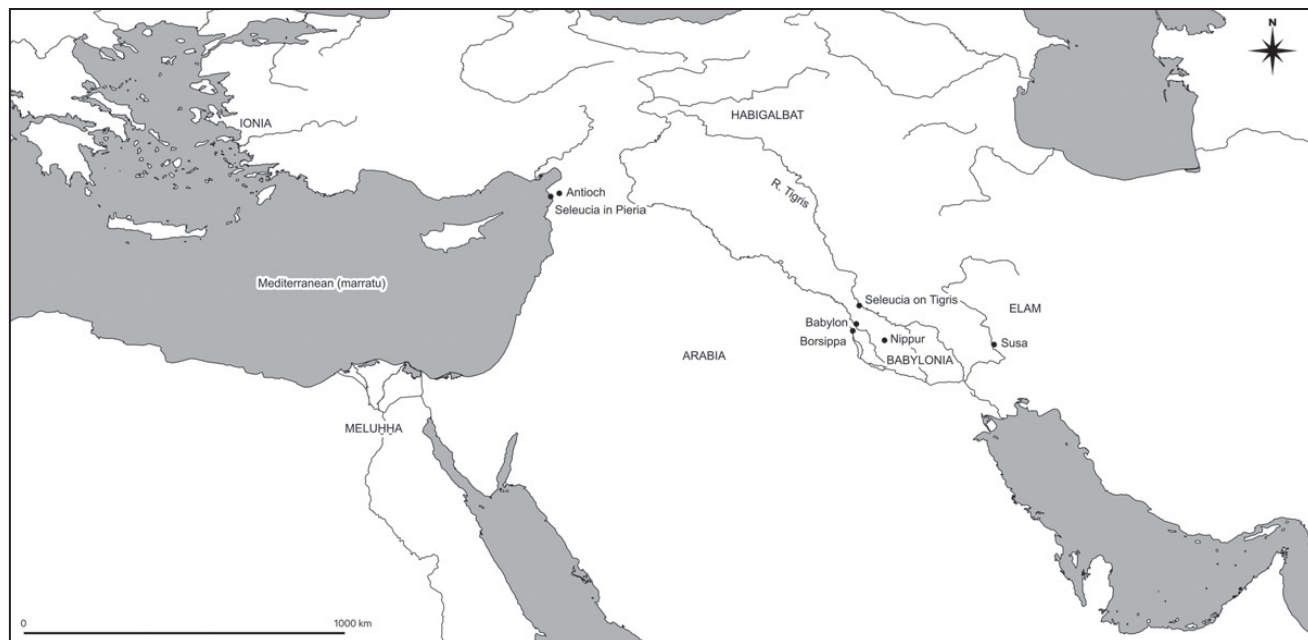


Figure 6.8 Places and peoples mentioned in Diaries or Chronicles 210–142 BC

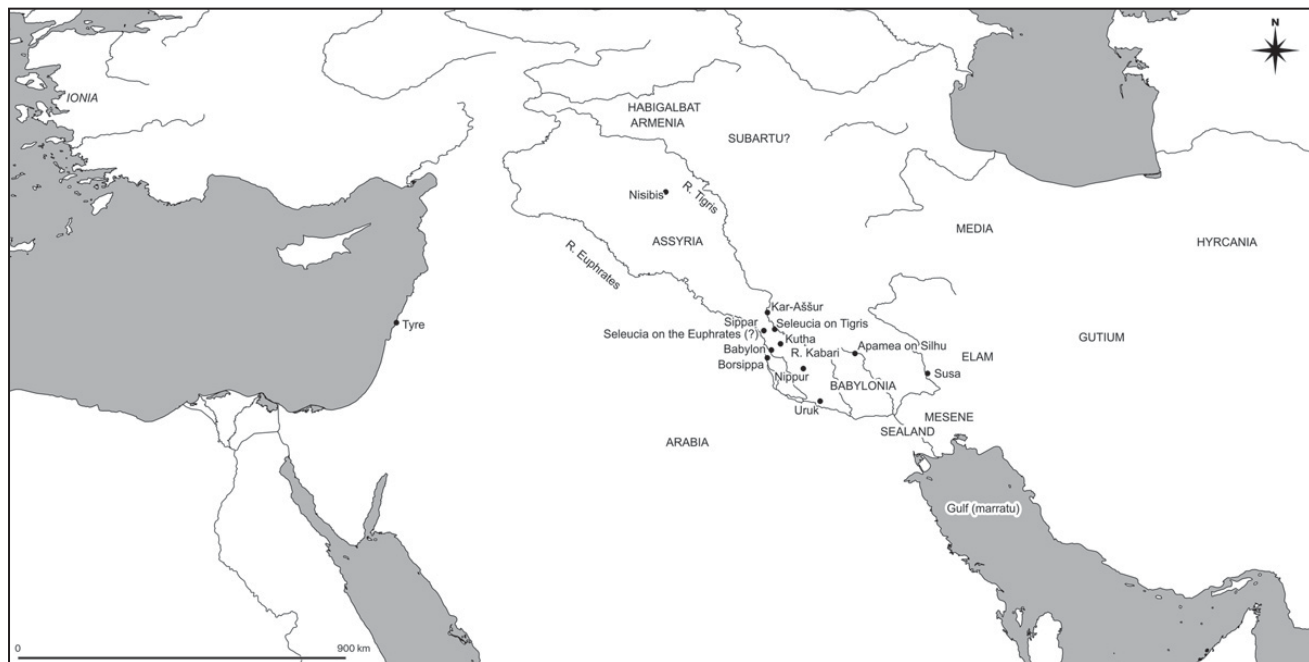


Figure 6.9 Places and peoples mentioned in Diaries or Chronicles 141–61 BC¹⁰⁹

¹⁰⁹ Italics denote places or other geographical features only attested in Chronicles.

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The chronological distribution of references to specific areas confirms that the Diaries and Chronicles track political change quite closely. Cyprus features in an Achaemenid period Diary but not in the Hellenistic sources, in keeping with the island's uncontested status as part of the Ptolemaic empire compared with the last decades of the Achaemenid empire when Persian activity in the area was relatively intense.¹¹⁰ Egypt, lost to the Persians between 402 and 343, is not mentioned in surviving Diaries or Chronicles from these decades (none are preserved from the second period of Persian rule between 343 and 332). The region then resurfaces in the Hellenistic texts with a chronological distribution which corresponds to the ebbs and flows of Seleucid/Ptolemaic hostilities.¹¹¹ *Habigalbat*, an archaic toponym for the region north of Mesopotamia, appears in the Diaries in 164 BC, reflecting the growing importance of Artaxiad Armenia.¹¹² Finally, the geopolitical shifts accompanying Babylonia's transition into Parthian control are visible from the pattern of references in Diaries from 150 to 140 BC. Egypt is last mentioned in 145; in the same year, Elam enters the Diaries' field of interest and becomes a constant point of reference in the following decade, as the Elymaeans capitalised on the regional instability caused by the Seleucid-Arsacid wars by attacking and plundering Babylonia. The year 144 sees the last reference to Antioch and places west of the Euphrates, except for a solitary reference to sacrifices 'in the Greek fashion' in a Chronicle from the early Parthian period which can hardly be taken as a geographical proxy; in the Diaries from 141, the first year of Arsaces' rule over Mesopotamia, the pattern of the following eighty years is set, with references to the Elamites and Media drawing the focus eastwards.¹¹³

¹¹⁰ AD –440 (from 382–1 BC) rev. 4'–5'.

¹¹¹ *BCHP* 3 obv. 23 (diadochs against Perdiccas); AD –273B rev. 29–30 (First Syrian War); *BCHP* 11 (Third Syrian War); AD –168A 15 (Sixth Syrian War).

¹¹² AD –164B 15'; see [Appendix 2](#) at the end of the chapter for all references.

¹¹³ Antioch: AD –143C flake; sacrifices 'in the Greek fashion': *BCHP* 18 B21'; A15'. The external toponyms and ethnics in Diaries from 141 BC are: Media (AD –140A rev. 4'); Arqani'a (= Hyrcania: AD –140C obv. 34); Elamites (in Babylonia: AD –140C obv. 35–41; rev. 31–5; –140D obv. 11'). See also [Appendix 2](#) at the end of the chapter. On the Parthian Diaries' geographical references see further Stevens 2019.

All this breaks down any simplistic contrast between intellectually acquisitive Greeks devouring new knowledge about Asia and culturally conservative cuneiform scholars ignoring the contemporary world, showing that Greek and Babylonian intellectuals of the early Hellenistic period responded in parallel ways to the same set of political changes. Scholars in Babylon and Athens did not typically have the same geographical interests, nor, with a few exceptions, did they share data or sources. However, from the late fourth century onwards they gained access to and utilised data from a similarly vast area, which for the first time was under the control of interacting dynasties from the same cultural background. The Seleucid Diaries and *HP* can be linked as 'Hellenistic' in two senses. First, because the Diaries' laconic references to Seleucid imperial capitals and Theophrastus' world geography of date-palms embed their authors securely in networks of knowledge which stretch across a much wider and specifically Hellenistic world. And second, because the shifts in their intellectual geographies compared with works of the preceding period are symmetrical, showing us a structurally similar response in two different cultures to the Hellenistic context of Macedonian imperialism.

6.3.2 *A More Connected World?*

The impact of Alexander's conquests on intellectual geographies in Greece and Babylonia was not only quantitative, but qualitative. Alongside the influx of new information about hitherto little-known places, there is evidence for a change in how those places were perceived: new routes of communication and the information transmitted along them facilitated new ways of referring to and describing foreign regions, both in isolation and in relation to one another. As we have seen, the changes in the *historiae* and the Diaries do not suggest any dramatic conceptual restructuring of the world in the Hellenistic period within either scholarly tradition. Yet the ways in which geographical references are utilised in both the Greek and Akkadian texts provide some evidence for a shift in how that world as a whole was represented, and, perhaps, imagined. In *HP* and the Hellenistic Diaries there is a sense of a

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more connected world, with distant areas that were formerly little known or even consigned to the realm of myth or marvel now linked more closely to core regions.

6.3.2.1 *From Eastern Thaumata to Global Exempla: the Hellenistic World of Theophrastus*

Compared with the *Historia Animalium*, the *Historia Plantarum* not only displays more locally differentiated knowledge of eastern regions, but also shows signs of a conceptual shift whereby these regions came to be treated as a more integrated part of the known and knowable world. Whereas Aristotle’s east is a little-known realm of exceptional zoological phenomena, in Theophrastus’ work eastern regions take on a more definite territoriality and function as sources of scientific exempla which can be connected, not just contrasted, with those found closer to home.¹¹⁴

From the moment eastern regions enter Aristotle’s text, the language used of them conveys a sense of separateness from the rest of the known world. Most of the geographical references in *HA* are toponymic, e.g. ‘In Boeotia many moles are found around Orchomenos’ (περὶ τὸν Ὀρχομενόν), but as one moves eastwards there is an increase in the proportion of ethnic and adjectival forms of reference: for example, Aristotle describes the mantichore as ‘the beast found among the Indians’ (τὸ ἐν Ἰνδοῖς θηρίον) and remarks that ‘Bactrian camels (αἱ κάμηλοι Βακτριαναί) walk laterally’.¹¹⁵ Using an ethnic or adjectival form of reference rather than a toponym has a somewhat delocalising effect, laying stress on an object or group with a given relationship to an area rather than pinpointing that area itself. With the furthest regions to the east and south-east – Arabia, Media, Bactria, India – ethnic and adjectival references predominate, creating the impression of geographical entities that are ill-defined and little known in comparison with nearer regions.¹¹⁶ This impression is reinforced by equivocations in the text about the quality of information available

¹¹⁴ For a fuller version of the argument in this section, see Stevens 2015: 143–50.

¹¹⁵ *HA* 605b31, 501a26, 498b8. In *HA* overall 29 of 286 geographical references (9 percent) are ethnic or adjectival (this excludes cases where the ethnic or adjective is not used as a geographical proxy, e.g. ‘The Egyptians say’, ‘Macedonian medimnus’).

¹¹⁶ See [Appendix 1](#) at the end of the chapter for references.

about these places: as well as his doubts about Ctesias, Aristotle explicitly acknowledges as secondary a higher proportion of his statements about eastern regions than about other areas, which may suggest a degree of distancing from the information recorded.¹¹⁷

The information which Aristotle goes on to record also portrays eastern regions as different in nature from the rest of the world. He usually cites localities in Asia or Egypt as sources of exceptions to rules, extreme zoological phenomena, or supporting evidence for surprising claims – a scientific equivalent of the ‘eastern marvel’ strand in other genres of Greek writing.¹¹⁸ For instance, Bactria occurs in *HA* only in the formula ‘Bactrian and Arabian’, in a passage about the peculiar characteristics of the camel; Arabia is otherwise mentioned only for the exceptional size of its lizards and rodents.¹¹⁹ In central Asia, Media is the exception to the rule that larvae that come from snow are red, while in Persia female mice reportedly become pregnant while still in the womb.¹²⁰ Egypt and India, lands especially rich in *thaumata* in Greek literature, retain this status in zoological terms in *HA*: Egypt is the home of the only blooded, egg-laying quadruped with a tongue (the crocodile), while the only animal with two rows of teeth lives in India (the martichore – if Ctesias can be trusted); the animals in Egypt are exceptionally fertile, those in India exceptionally large.¹²¹

In comparison, Theophrastus’ eastern regions are more precisely defined and less extreme environments. The majority of references to Arabia, Bactria and Media in *HP* are toponymic, conveying a greater sense of territoriality than those in *HA*.¹²²

¹¹⁷ Doubts about Ctesias: *HA* 501a25; 606a8.

¹¹⁸ A vast literature exists on marvel-writing. For Hellenistic writers, cf. Brown 1955; Dihle 1984.

¹¹⁹ See [Appendix 1](#) at the end of the chapter for references. ¹²⁰ *HA* 552b9; 580b29.

¹²¹ Crocodile: *HA* 503a1 (Aristotle’s categories of ‘blooded’ and ‘non-blooded’ essentially correspond to vertebrates and invertebrates). Martichore: *HA* 501a25–501b1. Fertility in Egypt: *HA* 562b25–6 (pigeons); 584b30–31 (multiple births); 584b6–10 (survival of babies).

¹²² See [Appendix 1](#) at the end of the chapter for references. While seven of eleven references to Arabia, Media and Bactria in *HA* are adjectival or ethnic, eighteen of the twenty-three in *HP* are toponymic; the five exceptions are ethnographical

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India, still at the edge of Greek geographical knowledge in the early Hellenistic period, receives mainly ethnic or adjectival references in *HP* too, but the proportion of toponyms is greater than in the earlier work. The higher frequency of toponymic referencing combines with the mention of specific topographical features, such as the settlements along the Arabian coast or the Akēsines river and Mount Meros in India, to create the impression of better-defined geographical areas.¹²³ The change visible from *HA* to *HP* as a result of increasing knowledge about the east is not only a filling in of the vast, vaguely outlined space of Asia, but the progressive re-imagining of that space as a series of definite regions and localities.

Furthermore, these localities are increasingly treated as parallel in nature to those closer to home. Eastern regions appear in *HP* in a broader range of thematic contexts, and are more frequently compared and connected with other regions. Rather than featuring as sources of exceptional phenomena which disrupt trends elsewhere in the *oikoumene*, they yield botanical exempla which illustrate and extend rules and patterns detectable in the Greek world. For example, Theophrastus links Media and Crete as locations where the rare tragacanth grows, while Bactria is aligned with Babylonia, Libya and Egypt through its climate.¹²⁴ Egypt itself no longer appears as the singular region of *HA* which is invariably invoked to draw a contrast with the situation 'in Hellas', but instead is frequently connected with places in the old Greek world: dates in both Egypt and Cyprus are purchased when green; Pontic and Egyptian wheats are both free from darnel; budding patterns in

statements and plant names including a toponymic adjective (e.g. 'Median apple') rather than true geographical references. Overall, *HP* contains fifty-four ethnic or adjectival references used as geographical proxies (7 percent – this excludes adjectives in names of plant varieties, like the 'Egyptian fig' – carob – which Theophrastus points out is incorrectly named). The geographical distribution of the sixteen ethnics used as geographical proxies in *HP* illustrates perfectly the trend of using an ethnic where the territory of the people was remote and/or ill-defined: in addition to one reference to the Hellenes (which is deliberately delocalised – Theophrastus is writing about all the lands in which there are Greeks, not just the mainland) and one to the Illyrians, we find: Indians (7), Lotus-eaters (4), Maryandynoi, Pissatoi, and Scythians (2) (references in [Appendix 1](#) at the end of the chapter).

¹²³ Hadramyta, Kitibaina, Saba, Mamali (*HP* 9.4.2).

¹²⁴ Tragacanth: *HP* 9.15.8; Climate in Bactria, Babylonia, Libya and Egypt: *HP* 8.6.6.

Egypt are comparable to those in Thessaly and Macedon due to similarly mild autumns.¹²⁵

The language of wonder and exceptionalism does sometimes creep into Theophrastus' text when eastern regions are under discussion, as with the huge corn of the Pissatoi, which makes the over-indulgent burst, or the fruit of the Indian banyan which is 'amazingly' (*thaumastōs*) small relative to the tree's size.¹²⁶ For the most part, however, the eastern flora of *HP* are 'peculiar' only in the sense of specific geographical distribution, featuring alongside many Greek plants in Theophrastus' discussion of varieties particular to certain localities.¹²⁷ At times, the presentation of plants from the east in *HP* even seems designed to counter stereotypical 'othering'. For example, stepping back from the idea of Egypt as a land of miraculous fertility, Theophrastus notes that not *all* grain is harvested exceptionally early there.¹²⁸ Even more strikingly, in his discussion of the Indian banyan, a classic eastern marvel, Theophrastus claims that while the banyan's secondary roots are 'peculiar' (*idia*), there is a 'more wondrous' (*thaumasiōteron*) tree in Opous, Thessaly which grows shoots from its leaves.¹²⁹ Here, he inverts the traditional conceptual geography of an *oikoumene* ringed by *thaumata* to locate a marvel at the heart of Hellas.

Ultimately, Egypt, India and the countries of western and central Asia emerge from *HP* not as singular and exceptional landscapes, but as areas whose climatic and botanical characteristics can be compared and connected with Hellas and other parts of the *oikoumene*. Indeed, *HP* features more frequent and more developed cross-regional connections and comparisons overall than *HA*, and this is arguably another 'Hellenistic' feature of the later text. Aristotle typically draws contrasts between two or three regions, such as 'the wild animals are wilder in Asia, while all

¹²⁵ Dates: *HP* 2.6.8; wheat: *HP* 8.4.6; budding patterns: *HP* 3.5.4. Other places are related to Egypt only twice in *HA*, both times contrastively (*HA* 606a21–2, 584b7–12); in *HP* over half of ca. fifty references to Egypt mention other areas, often as parallels to cases in Greece or the Mediterranean; see [Appendix 1](#) at the end of the chapter for all references.

¹²⁶ *HP* 8.4.5; 4.4.4. ¹²⁷ *HP* 4.1–12. ¹²⁸ *HP* 8.2.7; 3.5.4.

¹²⁹ *HP* 1.7.3. Cf. Pliny's much more fulsome account of the banyan tree's wonders at *HN* 12.22–23, dependent in part on Theophrastus but very different in tone.

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the ones in Europe are braver, and those in Libya most varied in form'.¹³⁰ Theophrastus offers more systematic and locally differentiated surveys: his account of timber-producing regions ranges from Corsica to Cyprus to Syria, highlighting local variation within Anatolia, while his discussion of date-palms jumps from Babylonia to Libya and then circles the eastern Mediterranean, from Egypt to Phoenicia and then Coele Syria.¹³¹ Some of the comparative data in *HP* is explicitly linked to Hellenistic conquest or settlement: we have already seen Theophrastus using Harpalus' botanical frustration in Babylon as evidence for the climatic preferences of ivy.¹³² But even where the Hellenistic context is not directly evoked, Theophrastus' greater use of location and ecology as analytical tools in comparison with Aristotle is at least facilitated and perhaps in part stimulated by Hellenistic colonisation, which led to more sustained communication between different regions and facilitated long-term observation of environmental and climatic characteristics.

6.3.2.2 *Beyond the Sea of the Sunset: a Hellenistic World in the Astronomical Diaries*

The narrow thematic focus of the Astronomical Diaries and their generally sparse narrative texture make it much more difficult to detect and analyse changes in conceptualisation than with the fuller and more explicit narratives about places that we find in the Greek *historiae*.¹³³ However, there are reasons for positing a conceptual shift regarding western regions symmetrical to that concerning the east in *HP*, and the development of a greater sense of the area from Macedon to Mesopotamia (and further east, in the early Seleucid and Parthian periods) as a connected world.

Sumerian and Akkadian literature preserves no literary discourse of wonder about the west comparable to the Greek tradition of eastern marvel-writing, but the Mediterranean Sea, or Akkadian *tāmti ereb šamši* ('sea of the sunset') had historically formed an important conceptual boundary. Always at one edge of the world from a Mesopotamian perspective, it was later identified, as we

¹³⁰ *HA* 606b18–20. ¹³¹ Timber: *HP* 5.2.1; date palms: *HP* 2.6.2.

¹³² *HP* 4.4.1; see page 287.

¹³³ The Chronicles are too few and fragmentary to attempt such an analysis at all.

have seen, as part of the ‘bitter river’ which ultimately encircled all the lands.¹³⁴ The regions around and beyond it held great symbolic importance; although the inhabitants of Mesopotamia were aware of them from an early period, they were traditionally, if not quite *terra incognita*, at least *terra inexplorata*, just as central and eastern Asia were to the Greeks. For rulers of Babylonia and Assyria, conquering or even reaching the shores of the Mediterranean was a feat worth boasting about; kings from the early second millennium down to the Neo-Babylonian period proudly relate in their inscriptions how they washed their weapons in the ‘sea of the sunset’, and the sea regularly appears in totalising expressions of world conquest.¹³⁵

First-millennium Assyrian kings had broken the boundary to some extent to exercise control over Cyprus and Cilicia, and the Akkadian version of one of Xerxes’ inscriptions mentions ‘the Ionians who live on this side of the sea, and those across the sea’.¹³⁶ Yet the regions on and beyond the Levantine coast remain obscure and vaguely localised in Akkadian sources before the Hellenistic period: Aššurbanipal’s inscriptions refer to the arrival at court of an envoy from Gyges of Lydia, ‘a country (lit. *nagû*) at the crossing-point of the sea, a distant place, whose name the kings my ancestors had not heard’, while as contacts with the inhabitants of Ionia intensified in the Neo-Babylonian period, *Yawanu* itself remained an ill-defined region.¹³⁷ The descriptor ‘across the sea’ was applied to islands in the Aegean and even parts of mainland Asia Minor, which were often reached by sailing along the Mediterranean coast rather than overland; there are no pre-Hellenistic attestations in Akkadian where the expression definitely refers to the

¹³⁴ See page 259.

¹³⁵ Liverani 1990: 48–50; Malāmāt 1998: 24–6; Rollinger 2012: 725–35.

¹³⁶ Cyprus was ruled by client kings of Assyria under the Sargonids; Cilicia was conquered by the Assyrians in the eighth century and reconquered in the early seventh under Esarhaddon. Neither region seems to have been under Neo-Babylonian control, although the Neo-Babylonian king Neriglissar invaded Cilicia in 557–556 BC. Xerxes’ inscription: *XPh* 23–4, trans. Kuhrt 2007 I: 304 §3.

¹³⁷ On the various versions of the Gyges episode presented in Aššurbanipal’s inscriptions over the course of his reign, see Cogan and Tadmor 1977 (interestingly, in what survives of the earliest recension, in Prism E, the land does not seem to be identified at all). On ‘Ionia’ in Neo-Assyrian and Neo-Babylonian Akkadian texts, see n.10.

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Greek mainland.¹³⁸ As with western and central Asia in *HA*, there is little sense of these regions as definite geographical entities in pre-Hellenistic Akkadian texts, and their distance and separateness from Mesopotamia are emphasised.

Indeed, the western sea and the regions beyond it were associated with strange and outlandish phenomena in Akkadian literary and scholarly texts, somewhat like the landscapes of the east in Greek literature. In the *Epic of Gilgamesh*, the eponymous protagonist sails across the western 'waters of death' to a land where the flood hero and his wife enjoy immortality, while on the Babylonian World Map the regions beyond the 'bitter river' are titled *nagû* (the same word used in royal inscriptions to refer to Mediterranean islands), including one labelled as 'Great wall, 6 leagues in between, where the sun is not seen'.¹³⁹

After Alexander, western Asia and the Greek mainland not only appear with increased differentiation and frequency in the cuneiform sources but, like India and east Asia in the Greek material, seem to become a more integrated part of the world, as regions now linked to Mesopotamia by dynastic origins, royal movements, official communications and military activity. A closer relationship with Ionia is reflected in the journeys to and from Sardis attested in the Diaries and Chronicles,¹⁴⁰ while in this period for the first time in Akkadian sources there are explicit references to individuals crossing the Mediterranean to mainland Greece. As early as 329 BC an individual whose identity is not preserved travelled 'from Susa to Hana',¹⁴¹ while Philip Arrhidaeus' departure for Macedon, and continued presence or death there,¹⁴² are noted by a Chronicle in 319 or 318 and 318 or 317 BC respectively – the first attested reference to a *king* of Babylonia crossing the sea.¹⁴³ A striking expression of the new relationship between Babylonia and the far west comes in a Chronicle from 282 BC, which records that 'the king' (Seleucus) mustered his troops at Sardis and made them cross

¹³⁸ Horowitz 1998: 320. ¹³⁹ Horowitz 1998: 21–2, 32; cf. Fig. 6.1.

¹⁴⁰ *AD* –273B rev. 29', 34'; *BCHP* 9 rev. 1'–2'.

¹⁴¹ *AD* –328 rev. 27' (probably a Macedonian general or official).

¹⁴² The reading of the tablet (*BCHP* 3 obv. 27') is uncertain; Van der Spek's commentary (*ad loc.*) discusses the possibilities.

¹⁴³ *BCHP* 3 obv. 27', 32'.

the sea to ‘the land of Macedon (*Makkadunu*), his land’.¹⁴⁴ While the emphasis on Seleucus’ connection to Macedon may be intended in part to underline the dynasty’s foreign origins,¹⁴⁵ the phrasing also serves to link Macedon more closely with Babylonia, recasting a region previously at the edge of the known world as the dynastic homeland of the kings of Babylonia. The Diaries’ laconic style precludes any explicit parallel for the ‘normalising’ descriptions of eastern regions in *HP*, but we should not underestimate the impact that the greater integration of the Aegean area and Greek mainland as visitable and knowable places had on the mental maps of those in Babylonia.

The stylistic conventions and fragmentary state of the Diaries and Chronicles make it difficult to draw conclusions about the overall shape and structure of the world they depict, but on an impressionistic level the Hellenistic exemplars convey a greater sense of connectedness which parallels what we saw in Theophrastus. In the Neo-Babylonian and Persian Diaries, the spotlight falls from time to time on individual regions outside Babylonia, but in the Hellenistic Diaries foreign places and peoples are more often mentioned in relation to the heartland or to each other, and there are more wide-ranging movements of people, resources and information. As well as the journeys to Macedon already mentioned, a variety of trajectories are traced across Eurasia. A Diary for 274–273 BC records that ‘the satrap of Babylonia and appointees of the king, who had gone before the king to Sardis in year 36, returned to Seleucia which is on the Tigris’; the same text reports the transport of elephants from Bactria and other goods from Babylon and Seleucia to ‘Beyond the River’ where the king’s forces were stationed.¹⁴⁶ In an early third-century Chronicle, Seleucus I is in the province ‘Beyond the River’ but Bactria and India occur in the following line, while a slightly later Chronicle records that the brother of Seleucus III travelled from Antioch to Seleucia on the Tigris.¹⁴⁷ *AD*–181 even tracks the progress of information between imperial centres: on the seventh day of the month Du’ūzu, a rumour of

¹⁴⁴ *BCHP* 9 rev. 1’–3’. ¹⁴⁵ Kuhrt 2002b: 24. ¹⁴⁶ *AD*–273B rev. 34’–37’.

¹⁴⁷ *BCHP* 7 obv. 13’–14’; *BCHP* 12 rev. 11’–13’.

6.3 'Hellenistic' Intellectual Change

the death of Laodice (in Antioch) came to Seleucia, and two days later reached Babylon.¹⁴⁸

In the Hellenistic Diaries, events and places from the coasts of Ionia and Syria to the eastern satrapies are not simply reported in atomised fashion, but linked together in a way unparalleled in previous examples of the genre, even Diaries written under the equally extensive Achaemenid empire. Of course, the surviving Hellenistic Diaries are more numerous than those from the Achaemenid period, and therefore contain more place names which could be connected, but the same trend is also visible when they are compared with the Parthian Diaries, which contain longer historical sections and more geographical references in total. Despite the greater overall frequency of toponymic and ethnic references in the Parthian texts, their geographical range is smaller than that of the Hellenistic Diaries and the frequency of references to external regions lower.¹⁴⁹ This strengthens the impression that the world of the Diaries written under Alexander and the Seleucids is distinctively 'Hellenistic' in a qualitative as well as a quantitative sense, reflecting the greater connectedness between east and west which also underlies Theophrastus' nuanced inter-regional comparisons and correlations.

If Theophrastus and one of the writers of the Astronomical Diaries or Chronicles had met, they would have had little geography in common. Even Berossus and Sudines, who actively engaged with Greek geographical traditions, may have had underlying models of the physical world very different from those of the Greek historians and philosophers whose geographical vocabulary they adopted and adapted. Yet the geographies of all these scholars can be seen as similarly 'Hellenistic'. Through the new routes of communication and intensified political and socio-cultural contacts which accompanied the formation and settlement of the Macedonian kingdoms, new knowledge became available about distant parts of the world as viewed from Greece and Mesopotamia respectively, and scholars in Athens and Babylon incorporated this

¹⁴⁸ AD –181 rev. 7–12. There is debate over the accuracy of this report, since it conflicts with other evidence which suggests Laodice was still alive in the 170s; see further Pirngruber 2012: 247–9.

¹⁴⁹ See further Stevens 2019.

into their work. Within their different intellectual programmes, all sought and selected data about a range of places which spanned the entire Hellenistic world, setting it alongside information observed or reported closer at hand as part of an overall dataset from which they would extrapolate significant patterns.

There is a genuine disparity between the intense engagement with eastern places, peoples and natural phenomena in Greek texts from the Hellenistic period and the archaising geographies of most contemporary cuneiform texts. But as we have seen, this is more likely to reflect pre-existing differences between Greek and Babylonian intellectual traditions than a lack of cross-cultural contact. And even in this apparently unpromising area there are meaningful connections to be drawn between Hellenistic Greek and Babylonian scholarship. Fragmentary though they are, the surviving geographical references of Berossus and Sudines demonstrate that some individuals who were familiar with cuneiform scholarship accessed and engaged with contemporary Greek writings about the wider world.

Meanwhile, Theophrastus and the anonymous Babylonian scholars who compiled the Diaries and Chronicles might not have had a shared vocabulary to describe the political restructuring of the Mediterranean and Near East, but their work reflects its impact in similar ways. The shifting range and distribution of places and peoples they mention correspond to a changing world in which, for the first time, large numbers of Greeks travelled to and settled in central Asia, and a king of Babylon could be assassinated on the way to ‘his land’, far beyond the bitter river.¹⁵⁰ And although they might each have imagined it very differently, that world itself is visible in all these scholars’ work – in the Seleucid landscapes where Berossus sets the campaigns of Nebuchadnezzar; in Sudines’ ability to correct Greek scientists about the properties of stones in Attica, and, more faintly, behind Theophrastus’ comparisons of soil and the royal messages which the Diaries track from Sardis to Babylon: a world of redrawn borders, changed horizons and new connections; a world transformed from the one in which Alexander set out on his path to victory, and ultimately death, in 334 BC.

¹⁵⁰ *BCHP* 9 rev. 1’–4’.

APPENDIX I

References in *Historia Animalium* and *Historia Plantarum* to Places Discussed

For completeness, this list includes all references, regardless of whether or not ethnics and adjectives are being used as a geographical proxy. Details of usage are discussed within [Chapter 6](#).

Akesines R.	<i>HP</i> 4.4.4; 4.11.13 (toponymic).
Anti-Lebanon	<i>HP</i> 9.7.1 (x2) (toponymic).
Arachosia	<i>HA</i> 499a4 (ethnic).
Arabia	Toponymic: <i>HA</i> 546b2; 606b5; <i>HP</i> 2.6.5; 4.4.14; 4.7.1; 4.7.8; 5.4.7; 9.4.10; 9.7.2 (x2). Adjectival: <i>HA</i> 498b9; 499a15. Ethnic: <i>HP</i> 9.20.5.
Arabian Chersonese	<i>HP</i> 9.4.2 (toponymic).
Arabian Gulf	<i>HP</i> 4.7.7 (toponymic).
Aria	<i>HP</i> 4.4.12 (toponymic).
Ascalon	<i>HP</i> 7.4.7 (x2); 7.4.9 (ethnic).
Asia	<i>HA</i> 569a19; 578b27; 606b16; 606b18; <i>HP</i> 4.4.1 (x2); 4.5.5; 8.4.5; 9.1.3; 9.3.4; 9.7.3 (toponymic).
Assyria	<i>HP</i> 8.4.3 (adjectival).
Babylon (Βαβυλῶν)	<i>HP</i> 2.2.8; 2.6.4; 2.6.6; 2.6.7; 3.3.5; 4.4.1; 8.7.4; 8.11.7 (toponymic).
Babylonia (Βαβυλῶν)	<i>HP</i> 2.2.2; 2.6.2; 8.6.6 (toponymic).
Bactra (Βάκτρα)	Toponymic: <i>HP</i> 8.4.5.
Bactria (Βάκτρα)	Toponymic: <i>HP</i> 4.4.7; 8.6.6. Adjectival: <i>HA</i> 498b8; 499b14.
Carmania	<i>HP</i> 4.7.5 (toponymic).
Cilicia	Toponymic: <i>HA</i> 606a17; <i>HP</i> 2.2.7 (x2); 2.2.10; 3.2.6; 4.5.5; 4.8.8; 8.2.9; 8.8.2. Ethnic: <i>HP</i> 9.20.5.
Coele Syria	<i>HP</i> 2.6.2 (toponymic).
Coptos	<i>HP</i> 4.7.1 (toponymic).
Cyprus	Toponymic: <i>HA</i> 552b10; <i>HP</i> 1.9.5; 2.6.7 (x2); 2.6.8 (x2); 5.7.1; 5.8.1. Adjectival: <i>HA</i> 511b24.

(cont.)

Damascus	<i>HP</i> 3.15.3 (toponymic).
Delta (Nile)	<i>HP</i> 1.9.5 (toponymic).
Egypt	Toponymic: <i>HA</i> 502a9; 503a1; 557a30; 559b1; 562b25; 581a1; 597a6; 606a21; 608b33; 612a16; 617b27; 617b29; 617b30; 584b7; 584b31; <i>HP</i> 1.1.7; 1.6.11; 1.14.2; 2.2.7 (x2); 2.2.10 (x2); 2.3.2; 2.6.2; 2.6.7; 2.6.8; 2.6.9; 3.3.5; 3.5.4; 4.2.1; 4.2.4; 4.2.5; 4.7.2; 4.8.2; 4.8.14; 4.10.2; 4.12.4; 6.3.1; 6.8.5; 8.1.6; 8.2.7; 8.6.6; 8.7.4; 9.15.1. Adjectival: <i>HP</i> 1.1.7; 1.11.2; 1.14.2; 3.1.5; 4.1.5; 4.2.4. Ethnic: <i>HA</i> 500a4; <i>HP</i> 4.8.11; 9.20.5.
Elephantine	<i>HP</i> 1.3.5; 1.9.5 (toponymic).
Ethiopia	Toponymic: <i>HA</i> 490a11; 573b28; <i>HP</i> 2.6.10; 9.15.2. Ethnic: <i>HA</i> 517a18; 523a18; 586a3; 586a4.
Euphrates R.	<i>HP</i> 4.8.10 (toponymic).
Europe	<i>HA</i> 579b6; 606b14; 606b15; 606b16; 606b18; <i>HP</i> 4.5.5; 9.7.4 (toponymic).
Hellas	Toponymic: <i>HA</i> 606a22; 584b11; <i>HP</i> 2.2.10; 3.3.5; 4.4.1; 4.4.5; 5.2.1; 6.4.10; 8.1.7; 8.2.7; 8.4.5; 8.11.6; 9.6.2; 9.15.1; 9.15.3. Ethnic: <i>HP</i> 4.4.4; 4.4.5; 4.4.10; 9.20.5.
Gedrosia	<i>HP</i> 4.4.13 (toponymic).
Gulf of the Heroes	<i>HP</i> 4.7.2; 9.4.4 (toponymic).
Hadramyta	<i>HP</i> 9.4.2 (toponymic).
India	Toponymic: <i>HA</i> 606a8; 607a34; <i>HP</i> 4.4.4; 4.4.11; 4.4.14; 8.4.2; 9.1.2. Adjectival: <i>HA</i> 499b19; 499b20; 597b27; 607a4; <i>HP</i> 1.7.3; 4.11.13. Ethnic: <i>HA</i> 501a26; 571b34; 610a19; <i>HP</i> 4.4.1; 4.4.5; 4.7.3; 4.7.8; 7.13.8; 9.7.2 (x2); 9.15.2.
Issus	<i>HP</i> 7.4.9 (toponymic).
Kitibaina	<i>HP</i> 9.4.2 (toponymic).
Lebanon	<i>HP</i> 9.7.1 (x3) (toponymic).
Lotus Eaters (Island of)	Toponymic: <i>HP</i> 4.3.2; ethnic: <i>HP</i> 4.3.1; 4.3.2; 4.3.4 (x2).
Mamali	<i>HP</i> 9.4.2 (toponymic).

Appendix 1: Places in *HA* and *HP*

(cont.)

Maryandynoi	<i>HP</i> 9.16.4 (ethnic).
Media	Toponymic: <i>HA</i> 552b9; <i>HP</i> 4.4.1; 4.4.3; 8.11.6; 9.1.3; 9.7.2. Adjectival: <i>HP</i> 1.13.4; 4.4.2 (x2).
Memphis	<i>HP</i> 1.9.5; 4.2.11; 4.2.12; 8.2.7 (toponymic).
Meros Mtn.	<i>HP</i> 4.4.1 (toponymic).
Nile R.	<i>HA</i> 597a6; <i>HP</i> 4.8.2 (toponymic).
Nisaeen Plain	<i>HA</i> 632a30 (adjectival).
Opous	<i>HA</i> 576b25; <i>HP</i> 1.7.3 (toponymic).
Orchomenos	<i>HA</i> 605b31; <i>HP</i> 4.10.1; 4.12.4; 9.13.1 (toponymic).
Pelusium	<i>HA</i> 617b30; 617b31 (toponymic).
Persia	Toponymic: <i>HP</i> 4.4.3; 4.7.5. Adjectival: <i>HA</i> 580b29; <i>HP</i> 1.11.4; 3.6.2; 3.14.4; 4.4.2 (x2). Ethnic: <i>HP</i> 4.2.7.
Petra	<i>HP</i> 8.11.5 (toponymic).
Pharos	<i>HA</i> 607a14 (toponymic).
Phoenicia	Toponymic: <i>HA</i> 525b7; 541a19; 577b24; <i>HP</i> 2.6.2; 5.7.1. Adjectival: <i>HP</i> 3.12.3; 9.2.3. Ethnic: <i>HA</i> 603a1.
Pillars of Herakles	<i>HP</i> 4.6.1; 4.7.1 (toponymic).
Pinaros R.	<i>HP</i> 2.2.7 (toponymic).
Pissatoi	<i>HP</i> 8.4.5 (ethnic).
Red Sea	<i>HA</i> 606a12; <i>HP</i> 1.4.2; 2.6.5; 4.7.1 (toponymic).
Saba	Toponymic: <i>HP</i> 9.4.2. Ethnic: <i>HP</i> 9.4.5 (x2).
Scythia	Toponymic: <i>HA</i> 605a20–1; 606a20; 606b4; 607a16. Adjectival: <i>HA</i> 597a5; <i>HP</i> 9.13.2. Ethnic: <i>HA</i> 576a21; 619b13; 631a1; <i>HP</i> 9.13.2; 9.15.2.
Soli	<i>HP</i> 2.2.7; 8.8.2 (toponymic).
Syria	Toponymic: <i>HA</i> 491a2; 577b23; 579b9; 580b1; 606a13; <i>HP</i> 1.11.4; 2.6.5; 2.6.7; 2.6.8; 3.2.6 (x2); 3.15.3; 4.2.4; 4.4.1; 4.4.14; 4.5.5; 4.8.4; 4.8.8; 5.3.2; 5.7.1; 5.8.1 (x2); 6.3.7; 8.6.3; 9.1.6; 9.2.2; 9.3.4; 9.6.1; 9.7.2 (x2); 9.9.2; 9.11.1. Adjectival: <i>HA</i> 627b17. Ethnic: <i>HA</i> 557a3; <i>HP</i> 2.6.5; 9.20.5.

(cont.)

Taurus Mtns	<i>HP</i> 8.2.9 (toponymic).
Thebaid	<i>HP</i> 4.2.10 (toponymic).
Thebes (Egyptian)	Toponymic: <i>HA</i> 500a4. Adjectival: <i>HP</i> 4.2.8. Ethnic: <i>HP</i> 9.20.5.
Thessaly	<i>HP</i> 3.5.4; 4.14.13; 8.7.4; 8.9.1; 8.10.4; 9.15.4 (toponymic).
Tylos	<i>HP</i> 4.7.7; 5.4.7 (toponymic).
Valley	<i>HP</i> 9.7.1 (toponymic).

APPENDIX 2

References in Diaries and Chronicles to Places Discussed

References are listed in descending chronological order as far as this can be established. Where Mesopotamian terms have been translated, the Akkadian is given in brackets. Ethnic and toponymic references are not distinguished. For reasons of space, this list excludes the very numerous references to Babylon, Babylonia, Seleucia on Tigris, and instances of the Tigris and Euphrates rivers used in place names (broken or ambiguous cases are included).

Assyria (<i>Aššur</i>)	<i>AD</i> -140A rev. 8'; -137A obv. 18'.
Antioch	<i>BCHP</i> 10 obv. 4'; <i>AD</i> -249A rev. 6'; <i>BCHP</i> 12 rev. 12'; <i>AD</i> -155 upper edge; <i>AD</i> -149 rev. 3', 9'; <i>AD</i> -143C 6'.
Apamea-on-Šilḫu	<i>AD</i> -140C rev. 35, 36 (x2).
Arabia/Arabs (<i>Arbāyū</i>)	<i>AD</i> -329B rev. 2'; -143C 7'; -129A ₂ rev. 19'; -125A obv. 21, rev. 20'; -124A obv. 8', rev. 5', 7' (x2); -124B rev. 21 (x2); -123A obv. 5'; -122D rev. 9'; -119B ₁ obv. 13'; -118A obv. 20 (x2), rev. 18'; -117B obv. 4'; -111B rev. 11', 12'; -108B rev. 20'; -105A rev. 22', 23'.
Armenia (<i>Armini</i>)	<i>AD</i> -95A obv. 10'; -95C obv. 5', 6'; -95D 11'.

Appendix 2: Places in Diaries and Chronicles

(cont.)

Bactria (<i>Bahtar</i>)	<i>AD</i> –322D rev. 22'; <i>BCHP</i> 7 obv. 14'; <i>BCHP</i> 9 rev. 8'; <i>AD</i> –273B obv. 31'.
Beyond-the-river (<i>Eber-nāri</i>)	<i>BCHP</i> 7 obv. 13'; <i>BCHP</i> 12 rev. 12'; <i>AD</i> –273B obv. 29–32' (x4); <i>AD</i> –270B 19.
Borsippa (<i>Barsip</i>)	<i>AD</i> –366A i 23; –302/–301 rev. 6; –187A rev. 13', 14', 17'; –155 rev. 9, 11; –132B obv. 29, rev. 31, 32 (x2) –132C obv. 29, 32; –126A rev. 1–2; –124A obv. 9'; –123A rev. 6; –122E rev. 15'; –118A obv. 20 (x3); –105A obv. 15'; –77A obv. 29.
Cyprus (<i>Kupru</i>)	<i>AD</i> –440 (redated to –382/1) rev. 4'.
Gulf (<i>marratu</i>)	<i>AD</i> –137D 13'.
Gutium (<i>māt Gutī</i>)	<i>AD</i> –330 obv. 18'; <i>BCHP</i> 1 obv. 9'; <i>BCHP</i> 3 rev. 12'; <i>AD</i> –136B obv. 13'; –118A rev. 20', 22'; –72 11.
Elam	<i>AD</i> –144 obv. 18', rev. 21, 22; –143A 19'; –140C obv. 35, 38, 40, 41, rev. 31', 32', 35'; –140D obv. 11'; –137A rev. 6', 7'; –137B rev. 21'; –137C rev. 17'; –137D obv. 12', rev. 1, 2; –132B rev. 19; –132D ₂ obv. 9', rev. 16', 18', 21'; –132D ₁ rev. 9'; –129A ₂ obv. 19'; –124B obv. 19' (x2), rev. 13' (x2), 18' (x2); –77B rev. 13' (x2).
Euphrates R.	<i>BCHP</i> 3 rev. 8'; <i>BCHP</i> 9 rev. 6'; <i>AD</i> –140C obv. 44; –137C obv. 19'; –133B obv. 26'; –125A obv. 18; –108A obv. 12'; –93B 9'; –72 9 (probably a reference to Seleucia).
Hyrkania (<i>Arqani'a</i>)	<i>AD</i> –140C obv. 34.
Ḫabigalbat	<i>AD</i> –164B 15'; –110 rev. 14'.
Ḫana	<i>BCHP</i> 1 obv. 6'; <i>AD</i> –328 lower edge; rev. 23'; <i>AD</i> –322D obv. 22; <i>BCHP</i> 3 obv. 36; <i>BCHP</i> 7 obv. 12'.
India (<i>Indu</i>)	<i>BCHP</i> 7 obv. 14' (uncertain; <i>in-du</i> is preserved before a break).
‘Ionia’ (<i>Iawanu</i> , <i>Iamannu</i>)	<i>AD</i> –330 rev. 9'; <i>BCHP</i> 9 obv. 5', rev. 6'; <i>BCHP</i> 8 rev. 13'; <i>BCHP</i> 7 rev. 5'; <i>BCHP</i> 6 obv. 6', 16'; <i>AD</i> –273B obv. 33'; rev. 2; <i>BCHP</i> 11 rev. 2', 15'; <i>AD</i> –168A obv. 14; <i>BCHP</i> 14 obv. 2.

(cont.)

Kabari R.	<i>AD</i> –140C rev. 38.
Kar-Aššur	<i>AD</i> –107A obv. 12; –90 rev. 17; –87A rev. 16'; –77B obv. 27'.
Kutha	<i>BCHP</i> 3 rev. 26'; <i>AD</i> –273B obv. 37'; –77A obv. 29'.
Macedon (<i>Makkadunu</i>)	<i>BCHP</i> I rev. 13'; <i>BCHP</i> 3 obv. 27, 32; <i>BCHP</i> 5 rev. 7'; <i>BCHP</i> 9 rev. 3'.
Media (<i>māt Mādāya</i>)	<i>AD</i> –140A rev. 4'; –137A obv. 19', rev. 9', 11'; –137C rev. 17'; –136C obv. 3'; –132B rev. 22; –126A obv. 8'; –124A rev. 24'; –119A ₂ 19; –111C 6'; –107C rev. 16'; 21'; –93A rev. 11, 23; –86B 10; –77A obv. 31'.
Mediterranean (<i>marratu</i>)	<i>AD</i> –155A upper edge; –149A rev. 3', 7'; –143C 6'.
Meluḥḥa	<i>BCHP</i> II obv. 2', 12'; <i>AD</i> –168A 15; <i>AD</i> –144 obv. 35'.
Mesopotamia (<i>birūt nārāti</i>)	<i>AD</i> –366A ii 4–5 (following the interpretation of Kuhrt 2007: 400–1).
Mesene (A ^{mes})	<i>AD</i> –132B rev. 19; –124B rev. 12'; –123A obv. 18'.
Mişir	<i>BCHP</i> 3 obv. 23; <i>AD</i> –273B obv. 29–30.
Nippur	<i>AD</i> –273B obv. 37'; –141C obv. 11'; –137D rev. 24.
Nisibis	<i>AD</i> –111B obv. 6'.
Pallukatu	<i>AD</i> –373A obv. 9'.
Persia (<i>Parsa</i>)	<i>BCHP</i> 3 rev. 10' (partially restored).
Razaundu	<i>AD</i> –369 rev. 8'.
Salamis (<i>Samine</i>)	<i>AD</i> –440 (redated to –382/1) rev. 4'.
Sardis (<i>Sapardu</i>)	<i>BCHP</i> 9 obv. 4', rev. 1'; <i>AD</i> –273 obv. 29'; –253B ₁ obv. 6'.
Sealand (<i>māt tām̄ti</i>)	<i>AD</i> –138D obv. 13', rev. 1'–2'.
Seleucia in Pieria	<i>AD</i> –149A rev. 6'.
Seleucia on the Euphrates	<i>BCHP</i> 10 obv. 6' (restored); <i>BCHP</i> II obv. 3' (restored), 7'–8'; <i>AD</i> –119D upper edge 2; –105A rev. 23'; –93A rev. 12, 24.
Sidon (<i>Šidunnu</i>)	<i>ABC</i> 9 2; 6.
Sippar	<i>AD</i> –330 rev. 6'; –105A rev. 3'.
Subartu	<i>AD</i> –107C rev. 16', 20'.

Appendix 2: Places in Diaries and Chronicles

(*cont.*)

Susa (<i>Šušān</i>)	<i>AD</i> –366A ii 8; –346 rev. 14; <i>ABC</i> 9 3; <i>AD</i> –328 rev. 27'; –183A 12'; –143A 18'–19' (x3); –137A rev. 7'; –132D ₂ obv. 9'; –90 rev. 1 (x2).
Tigris R.	<i>BCHP</i> 2 obv. 3; <i>BCHP</i> 6 obv. 11; <i>AD</i> –132B rev. 20; –130D obv. 19'; –107A obv. 13 (possibly a reference to Seleucia); –90 obv. 16' (x2), 32, 49, rev. 17; –83 4.
Tyre (<i>Šuru</i>)	<i>AD</i> –124B rev. 21'.
Uruk	<i>BCHP</i> 7 obv. 7' (partly restored); <i>AD</i> –137A obv. 16' (x2), rev. 5, 7; –137D rev. 25; –124B obv. 3'; –96A 12'; –87A rev. 14'; –82A obv. 20.

FROM ŠULGI TO SELEUCUS: HELLENISTIC
LOCAL HISTORIES

The Hellenistic geographies examined in [Chapter 6](#) illustrate the rewards of a structural approach to cross-cultural intellectual history. Although Berossus and Sudines' engagement with contemporary Greek geography provides a rare glimpse of direct cross-cultural exchange, the shifting toponymic repertoires of the Peripatetic *historiae* and the Astronomical Diaries and Chronicles allow us to draw further cross-cultural connections where no direct contact is visible, since these culturally discrete phenomena represent structurally similar responses to the political and cultural changes of the late fourth and early third centuries. All the texts under consideration there, however, engaged explicitly with the wider Hellenistic world. The current chapter goes further, seeking to draw a similar type of connection between compositions which on the surface have nothing to do with that world at all.

From geography we turn now to history, considering Greek and Akkadian historiographical texts from the Hellenistic period. Although these texts relate historical episodes from disparate times and places and display no sign of cross-cultural influence, close comparison shows that they can be viewed as parallel responses to the same large-scale political changes. Scholars in both cultures used constructions of the local past in a similar way, to voice present concerns and assert the continued importance of their communities in the new imperial world created by Alexander and his successors. Some of these texts link their historical narratives explicitly to the political conditions of the present; others describe events which are both temporally and geographically remote from the sites of Hellenistic imperialism. But they all share a concern with preserving local rights and privileges within an imperial framework, and both this concern and the rhetorical

strategies used to express it seem to respond to a specifically Hellenistic context. Local histories have long been analysed as one means by which Greek poleis forged an identity for themselves within the larger power structures of the Hellenistic kingdoms. Here I argue that the Greek case is part of a broader cross-cultural phenomenon: communities in both Greece and Babylonia turned to the past as one means of dealing with the challenges of the contemporary imperial world.

The first part of the chapter fleshes out the context for what follows, exploring local intellectual life in Hellenistic Greece and Babylonia through the biographies of a number of individuals. Here we will encounter once more Semos of Delos and Anu-ah-a-ušabši of Uruk. Emblematic at the start of this book of the possibilities and pitfalls of a Hellenistic intellectual history linking Greece and Babylonia, they now launch our second test case for such a history. In exploring commonalities between the lives and works of scholars in the cities of Babylonia and the Greek-speaking world, the chapter also highlights the cross-cultural importance of local scholarship in the Hellenistic period. Moving away from traditional *foci* of historical interest like Alexandria or Pergamon to consider the intellectual life of cities on the Greek mainland and the Aegean does not just allow us to draw a new set of cross-cultural connections; it also illuminates contexts and patterns of intellectual activity which are more representative of the Hellenistic world as a whole than the high-profile institutions and individuals which tend to dominate its histories.

The second part of the chapter turns to histories written during the Hellenistic period, outside these institutions and by individuals obscure to Clio's usual gaze. Through a close comparison of certain Hellenistic Greek and Akkadian historiographical texts, I argue that analogous narratives about the local past were constructed by Greek and Babylonian local elites to serve analogous purposes and that these narratives constitute cross-culturally parallel responses to Hellenistic imperialism. Similarities in the chronological distribution, *topoi* and narrative patterns of the texts under examination suggest that Greek and Babylonian scholars adopted similar rhetorical strategies to advance local interests on a broader imperial stage, and even to negotiate concrete privileges

for their community. By writing themselves and contemporary empires into local histories which often stretched back to the distant past, the elites involved in the production of these texts were also able to bolster a sense of pride in their community and present themselves as the latest in a long line of its guardians. Moreover, the precise nature of the parallels between these local histories and their contexts suggests that they do not just represent reactions to imperialism that occur transhistorically, but reflect and respond to aspects of imperialism characteristic of the Hellenistic world.

In thematic terms, this chapter acts in many ways as a mirror to the rest of the book: we have moved from the cosmopolitan to the local, from the greatest libraries of the ancient world to small and incomplete text collections, from predictions of the future to constructions of the past. At the same time, it offers perhaps the clearest expression of the argument running throughout: that the integration of Greek and Akkadian sources not only increases our knowledge of contemporary intellectual life in the Greek poleis or the temple communities of Babylonia, but also adds to our understanding of the Hellenistic world as a whole.

7.1 Local Intellectual Worlds

In Hellenistic Babylonia cuneiform scholarship was a local concern, practised by a small number of priestly families who passed on their expertise from one generation to the next. This is a far cry from the mobility and internationalism which tend to characterise our vision of Hellenophone intellectual life in the same period: great philosophers and poets circulating between the courts of the Hellenistic kings; parallel circulatory patterns at a somewhat lower level traced by itinerant performers who criss-crossed the Mediterranean celebrating poleis great and small. But outside these panhellenic orbits were many individuals whose intellectual profile was predominantly local: men (and occasional women) known today from a solitary honorific inscription in their local town, or little more than a name and number in Jacoby's *Die Fragmente der griechischen Historiker*. In terms of their socio-intellectual contexts, resources and aims, many of these

7.1 Local Intellectual Worlds

individuals had more in common with contemporary scholars in Babylonia than with fellow Greeks based at panhellenic centres like Alexandria or Pergamon. Here we will explore the lives of a few of them.

For Babylonia, our main focus is the city of Uruk. The finds of Late Babylonian cuneiform tablets from the Rēš temple and scholars' houses, and in particular the high proportion of preserved colophons naming the owner and scribe, enable us to build up an unusually detailed profile of cuneiform scholarship in the city over several centuries.¹ In the Greek world, no single site offers a comparably rich set of evidence for intellectual production: here we must draw on an abundant but scattered set of sources, comprising epigraphic documents and literary fragments and testimonia from or relating to Greek communities from the mainland, the Aegean and Asia Minor. As ever, the disparities between the source record from the two regions hinder comparison. Although any written record is inevitably incomplete, the fact that Greek was the majority language across the Mediterranean means that the Greek sources offer a relatively well-rounded picture of intellectual activity in the Hellenistic poleis. By contrast, the highly restricted level of cuneiform literacy in this period means that the activities and networks of cuneiform scholars can hardly be claimed as representative of intellectual life in the cities of Hellenistic Babylonia. Yet the aim here is not to provide a comprehensive survey of intellectual production in either cultural context or to claim that cuneiform scholarship in Babylonia was a mirror of Greek scholarship in the Aegean, but simply to highlight the comparability of the Greek and Babylonian individuals and communities who produced the local histories we will examine later. Anu-aḥa-ušabši and Semos introduce us to parallel worlds of local scholarship: communities of men from elite families with a long-standing stake in local political and cultural life, whose intellectual activity and networks revolved around that

¹ On the cuneiform sources from Hellenistic Uruk, see for overviews Oelsner 1986: 146–91; Pedersén 1998: 209–12; Oelsner 2003; with a focus on scholarly libraries/archives Clancier 2009b: 25–103, 387–409: 28–44; Robson *in press*; Proust and Steele 2019.

local centre, and whose work both reflected and fostered a strong sense of local identity.

7.1.1 Babylonia

7.1.1.1 *Anu-aḥa-ušabši of Uruk*

Anu-aḥa-ušabši was a typical, albeit particularly high-ranking, cuneiform scholar. Born in the early third century BC, he belonged to the Ekur-zākir family, who by this time had played a significant role in the temple hierarchy of Uruk for some four hundred years. This was a common scenario: cuneiform scholarship, like many Mesopotamian professions, had a strong local and familial dimension. Scribal training took place within the family, and scholarship was supported in the temples, where priesthoods and other prebendary positions were also hereditary.² As a result, scholarship in a given centre tended to be monopolised by members of a few local families. Uruk was no exception: indeed, during the Hellenistic period scholarship at the Rēš temple was dominated by just four families: Ekur-zākir, Hunzû, Sîn-lēqi-unninni and Aḥ'ûtu. These families were bound together by criss-crossing nuptial and pedagogical ties, and their involvement in the city's religious and intellectual life can be traced back for centuries.³

Members of Anu-aḥa-ušabši's family, the Ekur-zākirs, appear in documents from Uruk during the sixth century BC as scribes and holders of priestly prebends at Eanna, the city's main temple at the time.⁴ From the mid-fourth century onwards they are attested at the Rēš – the main temple after Eanna's decommissioning – as *āšipus*, 'incantation priests'.⁵ Specialists in the prevention, diagnosis and treatment of damage or disease caused by angry gods or malevolent supernatural forces, the *āšipus* were employed by the

² On the temple prebend system in Seleucid Uruk, see Corò 2005; Monerie 2017: ch. 8.

³ On the social and intellectual networks between the scholarly families, see further Robson 2008b: 256–7; Robson 2007; Ossendrijver 2011b; Robson *in press*.

⁴ Robson *in press*: ch. 4; Kümmel 1979: 30, 80, 130.

⁵ Fifth-century Uruk *āšipus* are known from the Šangû-Ninurta family, whose house was later occupied by Ekur-zākir *āšipus* (Robson 2008b: 227–40; Clancier 2009b: 30–3). The Šangû-Ninurta tablets from the house date to the late fifth century, while the earliest datable Ekur-zākir tablet is from 322 BC; it is likely that the Ekur-zākirs began their tenure in the mid-fourth century (Clancier 2009b: 58–61).

temple as ritual practitioners but also cared for private individuals. The Ekur-zākirs continued to occupy the *āšipu* priesthood in Uruk throughout the Seleucid period; by the time of Anu-aḥa-ušabši's birth, his family's connection with the discipline of *āšipūtu* at the Rēš was fifty to a hundred years old.⁶ This was not as ancient as the Sîn-lēqi-unninni family's hold on the profession of *kalû* ('lamentation priest', another cultic performer who specialised particularly in calendrical rituals), which they had been consolidating since the seventh century, but well established nonetheless.⁷ In addition to his primary role as *āšipu*, Anu-aḥa-ušabši, like several of his relatives, later became high priest of the Rēš.⁸ The holders of this prestigious position played a leading part in rituals, including the most important event in the ritual calendar, the *akītu* (New Year) festival: here, the high priest headed a procession of priests who escorted the statue of the god Anu through the streets of Uruk to the *akītu* temple.⁹ Since the temples were significant landholders and employers who exercised considerable power locally, Anu-aḥa-ušabši and his relatives were local notables at the heart of religious, economic and political life in the southern Babylonian metropolis.

Anu-aḥa-ušabši's scholarship, insofar as it is visible to us, was closely linked to his professional roles as *āšipu* and high priest of Anu and his consort Antu. Of the seven surviving scholarly tablets that he owned or wrote, the contents of four are directly related to ritual activity at the Rēš: a cultic calendar, hymns to Anu and the moon god, Sîn, and instructions for New Year rituals at Uruk in which the *āšipus* and high priest are prominent.¹⁰ A fifth tablet contains a historical text which describes the reign of a late third-millennium king of Mesopotamia and his relationship with the cult of Anu at Uruk: as evidence for the history and prestige of Anu's cult this composition would be of obvious interest to one of his priests, and we will return to it in [Section 7.2](#). The last two

⁶ The family tree of the Hellenistic Ekur-zākirs is complex; see Boiy 2010 for a revised reconstruction of two of the main branches.

⁷ On the Sîn-lēqi-unninni connection with *kalûtu*, see Beaulieu 2000; Clancier 2009b: 73–5.

⁸ McEwan 1981: 9–10; Linssen 2004: 17, 183. ⁹ McEwan 1981: 9–10.

¹⁰ K. 3753; *BRM* 4, 8; *UVB* 15, 37; *BRM* 4, 7.

tablets are astrological, reflecting Anu-aḥa-ušabši's secondary specialism as a scribe of *Enūma Anu Enlil*: a copy of a solar eclipse tablet from the series *Enūma Anu Enlil* and a tablet of astrological weather forecasts.¹¹ In Uruk the title *tupšar Enūma Anu Enlil* does not seem to reflect a distinct prebendary position as it apparently did at Babylon, and so Anu-aḥa-ušabši was probably not directly remunerated by the temple for his celestial scholarship.¹² However, the ability to predict and interpret celestial phenomena was important for the correct timing and performance of rituals, and so Anu-aḥa-ušabši's celestial specialism and the tablets relating to it are also closely connected with his core priestly duties at the Rēš.

Of course, these seven tablets probably represent only a fraction of Anu-aḥa-ušabši's intellectual output. Anything he wrote on parchment, papyrus or writing boards is lost forever, since these media have not survived the climatic conditions in southern Mesopotamia. His other cuneiform tablets will have been reused in antiquity or destroyed by later activities on the site, or perhaps they still await discovery. Given that all Anu-aḥa-ušabši's surviving tablets probably come from the temple, it is also hardly surprising that they focus on his priestly activities.¹³ If we had access to the tablets he kept at home it is likely that they would attest to the medical activities which also formed part of *āšipūtu*, like the collection belonging to an older branch of his family recovered from a private house in Uruk, which included many diagnostic and therapeutic tablets.¹⁴ Nonetheless, what survives is enough to demonstrate the local and familial dimensions to Anu-aḥa-ušabši's scholarly career and the nexus between his

¹¹ UCP 9, 398ff; TCL 6, 19. On the title and activities of the 'scribe of *Enūma Anu Enlil*', see page 36.

¹² McEwan 1981: 16; cf. Boiy 2004: 272–3 and Beaulieu 2006a: 18.

¹³ With one exception, Anu-aḥa-ušabši's tablets were among a large quantity of literary and scholarly tablets from Uruk acquired on the antiquities market in the early twentieth century and hence are unprovenanced; however, connections between these tablets and those later excavated from the Rēš, as well as clear evidence of illicit digging at the temple site before the main excavations, make it likely that the earlier tablets also come from the Rēš (Clancier 2009b: 35–7). The one provenanced tablet, *SpTU* 1, 2 (the historiographical text) was excavated from a residential area (near the house of the fourth-century Ekur-zākirs), but its colophon states that it was intended for dedication in the temple.

¹⁴ On the library of the fourth-century Ekur-zākir family, see Clancier 2009b: 59–61, 81–5.

intellectual activities and his role in the religious and political life of his city.

7.1.1.2 *A Local Concern: Cuneiform Scholarship in Hellenistic Uruk*

All the cuneiform scholars whom we know to have been active in Seleucid Uruk fit a similar profile. From the Sîn-lēqi-unninni family, the career of Anu-bēlšunu (1) has been mapped by Laurie Pearce and Timothy Doty.¹⁵ Born in 249 BC, Anu-bēlšunu followed the long-standing family path to *kalûtu*; he is first attested as a junior *kalû* in 231 BC copying a tablet for his father, and appears as the owner of tablets written by his own sons in the late third and early second centuries.¹⁶ The contents of the fourteen surviving scholarly tablets written or owned by Anu-bēlšunu reflect his professional activities at the Rēš: lamentations and rituals involving the *kalûs*; an astrological text in which each microzodiac sign is associated with rituals, omens and *materia medica*, and computations of lunar and planetary phenomena written by his son Anu-aba-utēr, which may have been used to predict dates when apotropaic rituals were likely to be needed or have had other astrological applications.¹⁷ Anu-aba-utēr's own portfolio is similarly specialised. A *kalû* of Anu and Antu like his father, and in addition a scribe of *Enūma Anu Enlil*, he owned a copy of a prayer for the prize bull recited during rituals in which the *kalûs* participated, and, as we saw in [Chapter 2](#), owned and copied a number of astrological and astronomical tablets.¹⁸

¹⁵ Pearce and Doty 2000. The (1) is to distinguish this Anu-bēlšunu from his homonymous grandson, Anu-bēlšunu (2).

¹⁶ Pearce and Doty 2000: 232–3; the tablet from 231 BC with Anu-bēlšunu's father Nidinti-Anu as owner is *TCL* 6, 46. The typical pattern of scribal activity whereby individuals appear as scribes early in their career and later as 'owners' was highlighted by Pearce and Doty 2000: 336; Ossendrijver has taken this further to argue that these represented strictly consecutive phases in the life of a scholar (Ossendrijver 2011b; Ossendrijver 2011a). On the meaning of 'owner' in this context, see page 59 n.89.

¹⁷ For the complete list of tablets, see Pearce and Doty 2000: 332–3. *TCL* 6, 12+ and *VAT* 7815, classified by Pearce and Doty as 'astronomical', are more correctly labelled as 'astrological': the former is a microzodiac text, the latter a *Kalendartext*. On the relationship between mathematical astronomy and astrology, see [Chapter 2](#).

¹⁸ Prize bull prayer: *BagM. Beih.* 2, 6; astrological: *TCL* 6, 12+; *VAT* 7815; astronomical: *ACT* 102 (restored), 135, 163, 165, 171, 194, 300, 400, 501, 600, 601 (restored), 640, 702 (restored), 802; cf. pages 36–7.

The scholarly tablets owned and written by other members of the Ekur-zākir and Sîn-lēqi-unninni families from Hellenistic Uruk also show a strong concentration on their respective priestly specialisms.¹⁹

The other two scholarly families, Ȝunzû and Aȝ'ûtu, are less well represented in the extant tablets from Uruk. This may to some extent reflect the accident of recovery: the provenanced tablets from the Rēš are almost all Sîn-lēqi-unninni and probably came from a storeroom belonging to the family, while many of the illicitly excavated tablets are likely to have come from similar caches where the Sîn-lēqi-unninnis and Ekur-zākirs may have been disproportionately represented.²⁰ The few Ȝunzû men who are attested in the Hellenistic scholarly tablets were *āšipus* like the Ekur-zākirs.²¹ Indeed, the two families worked together and taught each other's children: in the late third century Nidinti-Anu son of Anu-bēlšunu of the Ekur-zākir family trained Anu-uballiṭ son of Nidinti-Anu from the Ȝunzû family; Anu-uballiṭ in turn appears a generation later as the owner of a tablet written by a young Ekur-zākir scribe who was probably his apprentice, Šamaš-ēṭir son of Ina-qibīt-Anu.²²

The Hellenistic Aȝ'ûtus seem to have more of a connection with civic politics and administration than temple scholarship. A few members of the family appear in colophons as owners or scribes of scholarly tablets, but without any professional titles indicating a priestly or scholarly specialism.²³ However, several Aȝ'ûtus held important political offices in Uruk: we have already encountered the two Anu-uballiṭs who sponsored rebuilding at the Rēš temple in their capacities as governor (*šaknu* – Nikarchos) and 'head of the city officials' (*rab ša rēš āli* – Kephalon)

¹⁹ For brief lists of the tablets associated with each family and their contents, see Stevens 2013: 236–7; for fuller examinations of the Sîn-lēqi-unninni tablets see Robson 2008b: 244–57; Clancier 2009b: 73–80.

²⁰ On the excavation history and tablet finds at Uruk, see Clancier 2009b: 28–42.

²¹ Only three Ȝunzûs appear in Hellenistic scholarly tablets: Nidinti-Anu son of Ina-qibīt-Anu, and two of his sons (*TCL* 6, 5; 11; 16; 31; 39; cf. Robson 2008b: 240–4).

²² Nidinti-Anu son of Anu-bēlšunu descendant of Ekur-zākir as owner: *TCL* 6, 5; *TCL* 6, 16; *BRM* 4, 12. Anu-uballiṭ son of Nidinti-Anu descendant of Ȝunzû as owner: *TCL* 6, 39.

²³ Anu-balāssu-iqbi s. Anu-aȝa-ittannu d. Aȝ'ûtu and two of his sons are attested on three scholarly tablets (*TCL* 6, 1; 32; *AfO* 14, Taf. VI).

respectively.²⁴ The Aḥ'ūtus also have more of a tendency than other families to take additional Greek names, perhaps suggesting a closer relationship with the Graeco-Macedonian imperial administration; Anu-uballiṭ/Nikarchos, as we have seen, explicitly claims a connection to the Seleucid house with the statement that Antiochus II gave him his Greek name. In Nikarchos' branch of the family he is the only one with a double name, but the prevalence of Greek names among the relatives of Anu-uballiṭ/Kephalon suggests a similar engagement with Babylonia's new ruling elite: fourteen out of twenty-one known Aḥ'ūtus from this branch have Greek names, nearly half of which are based on names of Hellenistic rulers.²⁵

By contrast, the Ekur-zākirs and Sîn-lēqi-unninnis did not tend to hold high civic office, and none of those at the heart of Uruk's scholarly circles are attested with Greek names.²⁶ Given the Aḥ'ūtus' differing onomastic choices and greater involvement in local politics, their lower profile in the scholarly tablets may reflect not just patterns of preservation but a genuine difference in their socio-political position vis-à-vis the other three scholarly families. Yet their links with these scholarly families, their sponsorship of temple cult and their scribal activity illustrate the permeability of the intellectual, religious and political spheres in which members of the city's leading families were active, confirming the impression that

²⁴ See pages 226–7. Other Aḥ'ūtus who occupied important offices at Uruk include Anu-balāssu-iqbi, father of Anu-uballiṭ/Kephalon, who was *rab ša rēš āli* and representative of the sanctuary (*paqdu ša bīt ilāni*); Kephalon's two brothers Anu-bēlšunu and Timokrates (*paqdu ša bīt ilāni*) and his son Diophantos (*rab ša rēš āli*) – see Monerie 2012: 333–4; Monerie 2014: 83–4.

²⁵ Generations 2–5 of the family tree in Monerie 2014: 82 (the son of Ina-qibīt-Anu whose name is not preserved is excluded from the count). See Doty 1988: 100; Clancier 2011: 760; Monerie 2014: 80–5. Monerie highlights the political aspect of such 'Hellenisation' and makes the intriguing suggestion that the proliferation of Greek names in the fifth generation (156–124 BC) may reflect an attempt to gain or regain political influence after the family was ousted from the sanctuary administration under Antiochus IV). Dynastic names: Antiochus (x2), Alexandros, Seleucus. The presence of a Greek name alone cannot, of course, tell us anything about the degree to which the bearer adopted other elements of Greek culture.

²⁶ This does not mean that none of them had double names. In Hellenistic Egypt, individuals might use their Greek name in Greek documents and Egyptian in Demotic (or other Egyptian) documents, and from Uruk Greek documents are lacking. However, the fact that Greek names *are* used in some cuneiform documents suggests that we can draw tentative conclusions in cases where they are absent.

the cuneiform scholars of Hellenistic Uruk were part of a tight-knit local elite.

Even if we did not know of these families' Urukean origins from other sources, the locally centred nature of cuneiform scholarship in Hellenistic Uruk would be clear from the information about owners, scribes and sources recorded in the colophons of scholarly tablets. Every scribe and owner identified by an ethnic on tablets written in Uruk during the Hellenistic period is Urukean; since ethnics occur in a high proportion of tablets with preserved colophons, this is striking testimony to the localism of this intellectual community.²⁷ This is not to say that scholars and tablets never travelled; the names of owners and scribes from other cities do appear in the colophons of tablets from Uruk, and we will see [Section 7.1.1.3](#) that shared aspects of intellectual culture between Uruk and other cities afford further evidence for the movement of practitioners and texts.²⁸ The point is simply that there was a very strong tendency for those involved in intellectual production at a given centre to be local. This localism is unsurprising, since the socio-economic context of cuneiform scholarship favoured the consolidation of familial connections with local temples, rather than mobility between different centres. A man like Anu-aḫa-ušabši, with his Ekur-zākir heritage and his training as an *āšipu* of Anu and Antu in Uruk, would most naturally follow in his relatives' footsteps to gain a position at the Rēš; he would be much less likely to succeed in Babylon, where the cultic practices and calendar were different and temple rites and scholarship were in the hands of Babylonian families.

²⁷ Forty of fifty tablets with preserved colophons contain ethnics. In Hellenistic Uruk the use of ethnics in colophons may be more frequent than in preceding periods: fewer than a third of preserved colophons belonging to the fifth-century Šangū-Ninurta family contain an ethnic and the proportion is even lower among the fourth-century Ekur-zākirs. However, the difference from the Hellenistic tablets may also be due to the differing contexts (private house vs temple).

²⁸ E.g. *TCL* 6, 47 (owner/scribe and original from Nippur), *SpTU* 4, 125 (owner from Der; no separate scribe mentioned), *SpTU* 4, 185 (owner, scribe and original from Der); on the commentaries from Nippur found in the *āšipus'* house at Uruk see Gabbay and Jiménez 2019. While most of the tablets from Uruk featuring non-local owners or scribes seem to have been written elsewhere (suggesting that the tablets came to Uruk when families moved), cases like *SpTU* 3, 67, which has a Nippurean owner but a junior Urukean scribe, might suggest more active intercity networks in which scholars travelled to copy tablets or study with specialists from elsewhere.

The impression of local intellectual communities and networks is reinforced by the information about sources which sometimes appears in colophons of scholarly tablets copied from pre-existing exemplars. Based on the copying statements of tablets written in Achaemenid and Hellenistic Uruk, the sources used by Urukean scholars were overwhelmingly local: in fourteen out of the nineteen tablets where the origin of the source text is named, this is Uruk or one of its temples.²⁹ Likewise, very few Late Babylonian tablets from Babylon, Borsippa or Nippur mention external originals in their colophons.³⁰ Admittedly, the majority of copied tablets give no explicit information about their sources, but as Philippe Clancier suggests, this is probably because the default scenario was for the source to be a tablet from a local collection and the scribe did not usually feel the need to say so.³¹ Corroboration for this idea comes from the fact that when tablets *do* explicitly state that their source was local, these sources tend to be atypical in terms of their age or writing medium, and/or to have come from a temple library. Ten of the fourteen scholarly tablets from Uruk which specify an Urukean source were copied from writing boards, most of which are described as ‘old’ and some of which are also stated to be the property of the Eanna or Rēš temples; a further tablet gives as its source an ‘old tablet’ from the Rēš.³² This suggests that a local source text on a perishable medium, of considerable antiquity and/or from a temple collection might warrant special mention, and by implication a regular tablet,

²⁹ Uruk: *SpTU* 3, 66; *SpTU* 4, 127 (Eanna temple), *BRM* 4, 7; 8; *GDBT* Taf. 11–12; *SpTU* 1, 2; *UVB* 15, 37 (Rēš); *SpTU* 1, 71; *SpTU* 3, 91; 97; 120; *TCL* 6, 12; 39; *GDBT* Taf. 15–16 (‘Uruk’). Other cities are Babylon (*TCL* 6, 16), Borsippa (*TCL* 6, 32), Nippur (*SpTU* 2, 34), Der (*SpTU* 4, 185), unknown (*TCL* 6, 4).

³⁰ Babylon: *LBAT* 1604: colophon edited in Hunger 1968: no. 152 (original from Borsippa; no explicit statement as to place of copying), Hunger 1968: no. 156 (original from Borsippa); Borsippa: Hunger 1968: no. 140 (copied from an inscription in Enamtila in Babylon); Nippur: Hunger 1990: no. 119 (original from Babylon).

³¹ Clancier 2009b: 264.

³² Writing board: *SpTU* 3, 66; 97; *SpTU* 4, 127. ‘Old’ writing board: *BRM* 4, 7; *GDBT* Taf. 11–12; *SpTU* 1, 2; *UVB* 15, 37; *TCL* 6, 12; 39; *GDBT* Taf. 15–16. ‘Old’ tablet: *BRM* 4, 8. For the temple sources see n.29. Of the remaining three tablets, two (*SpTU* 1, 71 and *SpTU* 3, 91) are broken where the source type might have been specified; the other (*SpTU* 3, 120) states that the source was incomplete (nu.al.til) which may or may not be significant.

owned by a private individual, might not.³³ It seems likely, therefore, that in the majority of cases sources were local. Caution is needed, however, in what we extrapolate about the reasons for such localism.

7.1.1.3 *Localism, Not Parochialism*

Although Urukean scholarship in the Hellenistic period revolved around local practitioners and local concerns, this does not mean that Anu-aḫa-ušabši and his colleagues knew nothing of supra-local traditions or trends, or that they had no access to texts and expertise from elsewhere. In addition to the movement of tablets and practitioners, the scholars of Uruk can be linked with their counterparts in other cities through a shared relationship to compositions which traditionally formed a core element of Sumero-Akkadian scholarship. The various scholarly disciplines (*āšipūtu*, *kalūtu*, etc.) were associated with certain series of tablets, like *Enūma Anu Enlil*, which contained knowledge and procedures key to their particular specialisms. These texts played an essential part in their professional training and practice and were copied and used throughout Mesopotamia over many centuries. The scholars of Hellenistic Uruk still studied and copied these series, and their versions show a high degree of agreement with copies and commentaries from other cities in Babylonia, which situates them within a regional intellectual *koine* and implies ongoing exchange between centres. Uri Gabbay and Enrique Jiménez detect particularly close links between commentaries from Uruk and Nippur, suggesting a shared southern Babylonian tradition, but some Uruk copies and commentaries on textual series are very close in terminology and structure to those from Babylon or Sippar.³⁴

³³ This special status of temple originals would fit with the fact that in Seleucid Uruk the temple collections seem to have been more closely guarded than private collections; unlike those from private houses, tablets which state that they were destined for the Rēš do not contain borrowing formulae, suggesting that these could not be removed from the sanctuary (Robson and Stevens 2019).

³⁴ Gabbay and Jiménez 2019. Seleucid tablets from Uruk which have close analogues in northern Babylonian cities include *SpTU* 3, 87, an extract from Tablet 1 of the medical omen series SA.GIG which closely parallels the version at Babylon (George 1991); *BagM. Beih.* 2, 61, a copy of *Šumma Izbu* Tablet 7 which closely parallels both the Late Babylonian copy from Sippar and a Neo-Assyrian tablet from Kuyunjik published in Leichty 1970: 95–6; and *TCL* 6, 3, Tablet 6 of *Šumma Pān Tākalti* from the liver omen

Copying statements listing originals from other cities also provide explicit evidence of transmission between centres: for example, the colophon of a copy of *Enūma Anu Enlil* 56 made in Uruk in 213 BC states that its source was a writing board from Babylon, and a similar copying statement can be restored in a commentary on Tablet 1 of the same series.³⁵

Regional trends apparent in multiple centres offer further evidence of the interconnections between scholarly communities in different cities: the prominence of mathematical astronomy and zodiacal astrology in the work of Anu-aba-utēr and other scribes of *Enūma Anu Enlil* at Uruk is paralleled at Babylon, reflecting the rise of these two disciplines across Babylonia from the late fifth century onwards.³⁶ Indeed, it looks increasingly likely that the observational data for celestial scholarship in Late Babylonian Uruk came from Babylon, which affords further evidence of continued interchange between the two centres in the late first millennium.³⁷ Both traditionalist and innovative aspects of the Uruk scholars' work thereby demonstrate that their intellectual horizons and networks extended beyond their home community.

At the same time, the way in which broader trends developed and core texts were interpreted in Uruk reinforces the importance of local tradition and practice. Although the rise of mathematical astronomy and zodiacal astrology was a development shared between Uruk and Babylon, there were also local differences in intellectual praxis: tablets of astronomical calculations from the two cities use different formats and notation conventions, while microzodiac tablets and horoscopes exhibit significant variations in content and methodology.³⁸ There is also some evidence to link System A mathematical astronomy (which models celestial

series *Bārūtū*, which is almost identical to a fragmentary Late Babylonian copy from Babylon and a Nineveh MS (Koch-Westenholz 2000: 343–53). On the stability of the major textual series throughout first-millennium Babylonia (and Assyria) and an argument that they should, despite some doubts in Assyriological scholarship, be seen as a 'canon', see Frahm 2011b: 317–20.

³⁵ *TCL* 6, 16 rev. 54; *AfO* 14 Taf V rev. ii.20: [... gaba.ri] e^{ki} sar^{ma}.

³⁶ On the emergence of mathematical astronomy and zodiacal astrology, see Britton 1993; Rochberg 1993: 31–6. On connections between celestial scholarship in Late Babylonian Uruk and Babylon, see Steele 2016b; Hunger 2019.

³⁷ Steele 2016b. ³⁸ Neugebauer 1955b: 4–5; Robson 2005; Monroe 2016.

movements using step functions) to Uruk and System B (which uses zigzag functions) to Babylon, although tablets using both systems are found in both centres.³⁹ Despite the close relationship between the textual traditions of the standardised series at Uruk and Babylon, copies from the two cities also show a certain degree of local variation: for example, copies of *Enūma Anu Enlil* 20 from Uruk and Babylon specify different directions for the movement of the eclipse shadow and different times for the duration of the eclipse.⁴⁰ In fact, some Urukian copies of *Enūma Anu Enlil* are closer to recensions from Neo-Assyrian centres several centuries earlier than to contemporary texts from Babylon.⁴¹

A final factor instrumental in the fostering of local traditions was the aura of secrecy cultivated by cuneiform scholars in relation to their craft. Protective formulae appear in the colophons of certain scholarly tablets which deal with material core to individual scholars' disciplinary specialisms. Backed up by divine sanctions, these formulae state that only certain properly qualified persons should have access to the privileged knowledge the tablet contains.⁴² Only a few of these protective formulae restrict access on grounds of geographical origin rather than intellectual expertise (most of them forbid the 'unlearned' or 'non-expert', *lā mūdû*, literally 'the one who does not know', from viewing the tablet's contents).⁴³ It is also not clear how far such formulae represent practical prohibitions as opposed to a rhetoric of exclusivity aimed principally at maintaining the standing and disciplinary identity of

³⁹ Neugebauer 1955b: 41–2; Robson 2008b: 218. On System A and B, see page 49.

⁴⁰ Eclipse shadow: *Afo* 14 Taf. VI obv. 1–2; *Sptu* 4, 162 obv. 1–2 (Uruk); *LBAT* 1534: obv. 4'–5', *LBAT* 1538 obv. 7–8 (Babylon). Eclipse duration: *Sptu* 4, 162 obv. 10–13 (Uruk); *LBAT* 1538 obv. 11 (Babylon). Other differences include possible omissions or additions, but caution is needed here since the Uruk tablets are commentaries, not editions, and thus selective in their coverage.

⁴¹ Rochberg-Halton 1988c: 174–229; Beaulieu 2010: 11–12.

⁴² For varying interpretations of the protective formulae in colophons, see Offner 1950; Borger 1964; Lenzi 2008b: 168–219; Stevens 2013; Robson 2018.

⁴³ On the typical structure of protective formulae see Borger 1964; Lenzi 2008b: 168–204 (for the narrower categories of 'secrecy labels' and *Geheimwissen* colophons); Stevens 2013 (with an expanded understanding of the protective formula). The colophon of BM 42294 has a rare geographical prohibition: 'to impart this knowledge to a non-citizen of Babylon or a non-citizen of Borsippa ... is a taboo against Nabû and Nisaba' (see Lenzi 2008b: 126 n.303; a similar tablet from Babylon is discussed on p. 164).

the various scholarly professions.⁴⁴ Nonetheless, this protective attitude towards scholarly knowledge as a commodity restricted to the learned few is likely to have contributed to reducing exchange and transmission of tablets and other written media beyond the local context.

Anu-aḥa-ušabši, Anu-bēlšunu and their colleagues were not working in a backwater, cut off from intellectual resources and developments elsewhere. They shared interests, and sources, with scholars in Babylon and other cities, and they continued to engage with the core compositions of traditional cuneiform scholarship. Yet their engagement was selective, and gave primacy to the concerns of local cult and the development and preservation of local intellectual praxis and identity. They were scholars of Uruk first, of Babylonia second. Indeed, it is tempting to see in the protective formulae they applied to their tablets, and the persistent use of the ethnic ‘Urukean’ – where ‘Uruk’ is often written with the learned logographic writing TIR.AN.NA^{ki}, literally ‘rainbow city’ – a deliberate assertion of local identity by this group of scholars.⁴⁵ This would be in keeping with other indications of a growing sense of independence from Babylon and a strengthening of civic identity within Uruk during the Achaemenid and Hellenistic periods, visible in the elevation of Anu to the top of the pantheon, the reorganisation of the cult and the growing popularity of Anu- and Antu-names.⁴⁶ If, as Clancier suggests, ‘Urukean’ was in this period a designation reserved for the old urban nobility, the use of the ethnic would also have acted as a marker of elite status and a long Urukean heritage, further

⁴⁴ Against a previous tendency to view texts marked with the formulae as an abstract body of ‘secret knowledge’, Stevens 2013 argued that they should be viewed in terms of the professional praxis and identity of the individual practitioner; Robson 2018 has taken this further to offer a holistic study of the purposes of protective formulae which analyses them in terms of social status and perceived threats.

⁴⁵ TIR.AN.NA^{ki}: e.g. *ACT* 101 (Colophon J) rev. 12 (Ina-qibīt-Anu Ekur-zākir); *BRM* 4, 21 rev. 10 (Nidinti-Anu Sin-lēqi-unninni); *TCL* 6, 39 rev. 29 (Šamaš-ētir Ekur-zākir).

⁴⁶ Linssen 2004: 14–15; Beaulieu 1992: 53–69; Clancier 2009b: 109. The exact chronology of these changes is not certain: based on onomastics Beaulieu (54–69) places the change from Ištar to Anu as principal deity between the first year of Darius I (when documentation from the Eanna temple ends) and the beginning of the reign of Darius II (424 BC), when newly abundant documentation shows that Anu names are already dominant.

enhancing the sense of an exclusive community.⁴⁷ The cuneiform scholars of Seleucid Uruk were not just Urukean, but consciously and proudly so.

7.1.2 *The Greek World*

Without the archival assemblages that we find in Babylonia, it is more difficult in the Greek world to reconstruct intellectual communities and networks, or draw conclusions about the scope of any individual's intellectual production.⁴⁸ Our knowledge of the work of many Hellenistic Greek writers derives solely from titles or summaries, preserved in inscriptions or later literary quotations, which may not accurately reflect either the range of a given writer or the content and scope of any cited works.⁴⁹ The insecurity of the textual tradition relating to each author is, however, offset somewhat by the large number about whom we have *some* information, and in this sizeable dataset clear patterns can be detected. Alongside the polymaths of Alexandria or Pergamon, the statesmen-scholars like Hieronymus of Cardia, and the itinerant poets and performers honoured across the Hellenistic world, the literary and epigraphic sources reveal another set of Greek intellectual practitioners whose activities and interests parallel those of Anu-aḡa-ušabši and his fellow Babylonian scholars much more closely: men from local families, active in local cult and politics, whose intellectual production revolved around their own community and their own role(s) within it. Among the historians, this is the category Katherine Clarke has distinguished as 'the local historian who wrote περὶ πατρίδος' ('about his homeland').⁵⁰ A few examples will serve to illustrate these individuals' ubiquity across the Greek-speaking world, and their commonalities with contemporary cuneiform scholars in Babylonia.

⁴⁷ Clancier 2011: 757.

⁴⁸ The problem of completeness also arises for Babylonia, but at Uruk the collections of tablets associated with particular individuals and families leaves us on firmer ground for extrapolating the intellectual range and specialisms of individuals.

⁴⁹ Brunt 1980: 486. ⁵⁰ Clarke 2005: 117.

7.1.2.1 *Semos of Delos*

For our first example we return to Semos.⁵¹ The Suda's statement that he was a Delian is supported by the fact that five of the nine attested bearers of this name come from the island and from a family group prominent in the local epigraphic record over several centuries.⁵² Like the Ekur-zākirs and the other scholarly families of Uruk, this family played an important part in local cultic and political life, which due to Delos' status as a panhellenic religious centre were particularly closely intertwined. Men named Semos and their relatives appear frequently in the accounts and offering lists maintained by the Delian *hieropoioi* (sacred magistrates who oversaw temple cult and finances), both as presiding civic magistrates and as dedicants of votives. One Semos is attested as dedicant in the *hieropoioi* records from 301 BC, with his son Kosmiades subsequently acting as *choregetes* ('chorus leader', i.e. supplying the costs for the production of a chorus) in 268.⁵³ Kosmiades' son, another Semos, was *epistates*, governor, in 229 BC, and was honoured by the city of Theangela in Karia for helping to return local women seized by pirates.⁵⁴ A second Kosmiades, probably the son of the *epistates*, appears in the late third-century *hieropoioi* lists, and a funerary inscription on Rheneia dated to 225–200 BC is likely to be his.⁵⁵ Yet a third Semos, probably the son of this Kosmiades, is attested as *hieropoios* in 198 and *archon* the following year, and further homonyms can be traced in later inscriptions.⁵⁶

⁵¹ *FGrHist*/BNJ 396; see also Jacoby 1923; Lanzillotta 1996; Bertelli 2009; Thomas 2014: 246–9. Boshnakov (2004, esp. 53–69), followed cautiously by Shipley (Shipley 2007: 349), has identified Semos with Pseudo-Scymnus, but in my view his arguments are not compelling.

⁵² Suda s.v. Σῆμος; *LGP*N 1 s.v. Σῆμος, nos. 1–5. All the Delian homonyms lived within the Hellenistic period; the remaining four individuals are from seventh/sixth-century BC Mytilene (*LGP*N 1 s.v. Σῆμος, no. 7), fifth-century Styra (no. 6), fourth-century Syros (no. 8 – perhaps a relative of the Delian family?) and second- or third-century AD Athens (*LGP*N 2 s.v. Σῆμος).

⁵³ *IG* XI.2 146.B9, 110.9. ⁵⁴ *IG* XI.4 693.20, 1024, 1054.

⁵⁵ *hieropoioi* lists from 208, 207 and 200 BC (*I.Dél*os 366.126, 369A.32, 372A.185); the funerary inscription (*EAD* 30 220) is dated to 225–200 BC.

⁵⁶ E.g. *I.Dél*os 380.84, 385.86, 396B.21, 421.75, 422.27, 439a.48, 442.102, 455Bb.14.

Which, if any, of these men is our author? A *terminus post quem* for Semos' work is supplied by the mention in Fragment 9 of a golden drinking cup dedicated by a Delian woman named Echenike; this votive has been plausibly matched with a dedication recorded in the temple inventories for 250 BC.⁵⁷ Wilamowitz and Jacoby identified the author with Semos the *epistates*, and most other commentators have followed them (including Lucio Bertelli in his edition of the fragments for *BNJ*), but given the specialised knowledge of local beliefs, votive offerings and ritual practices in Semos' work (on which see below), an equally plausible contender is the later *hieropoios*.⁵⁸ The latter would present a particularly close parallel to Anu-aḥa-ušabši, given his direct involvement in temple worship, but whichever identification is correct, Semos, like his Urukian counterpart, came from an elite family with a deep and enduring investment in the civic and sacred life of their community.

Semos' scholarship was, like that of Anu-aḥa-ušabši, closely linked to his local environment. His main work was a *Delias* (or *Deliaka*) in eight books, of which twenty-four fragments survive.⁵⁹ These fragments show that the work dealt with local history, customs and cult: Athenaeus quotes the *Delias* on the origins of the musical instrument the *phoinix* (made from the palm in Apollo's temple) and the digging of cooling pits on the island of Kimolos, as well as the drinking cup dedicated by Echenike.⁶⁰ In fact, what is preserved of Semos' work suggests a particularly strong knowledge of and concern with Delian religious life: as well as Echenike's cup and Apollo's palm, the fragments include a cultic aetiology for the name of the nearby island of Psammetiche (named after a flatbread offering); details of sacrifices to the local goddess Brizo, and an account of how one Parmeniskos of Metapontum, who had been deprived of the ability

⁵⁷ *IG* XI.2 287B 75; Lanzillotta 1996: 287–8; Bertelli 2009 *ad F.* 9 (nb. the term used in the inscription is *kylix*, not *hedypotis* as in the *Delias* fragment).

⁵⁸ Wilamowitz-Moellendorf 1884: 259–60 n.22; *FGrHist* 396; Bertelli 2009 'Biographical Essay'.

⁵⁹ *FGrHist/BNJ* 396 T1, F1–14; the title is *Deliaka* in Harpocration and the Suda, but *Delias* in Athenaeus and other sources.

⁶⁰ *FGrHist/BNJ* 396 F1, 3, 9.

to laugh by divine intervention, miraculously recovered in the Delian Letoon upon seeing the shapeless cult image of Apollo's mother.⁶¹ Semos appears to have had a special interest in cultic music: several of the *Delias* fragments treat this theme, as did a separate work *On Paeans* which is also quoted by Athenaeus.⁶² Just as Anu-aḥa-ušabši's scholarly activity centred on his roles as Uruk *āšipu* and high priest, Semos' focus on Delian and Cycladic affairs and his in-depth knowledge of cultic matters fits his family's position as Delian notables with a long-standing involvement in the island's political, administrative and religious life.

7.1.2.2 Local Intellectuals of the Hellenistic Greek World

Numerous individuals whose life and intellectual production follow a similar trajectory to that of Semos can be found in the pages of *FGrHist* and in epigraphic sources from all parts of the Greek-speaking world. From mainland Greece, a very similar figure to Semos, and probably his near-contemporary, is Anaxandridas of Delphi. Dated with reasonable certainty to the late third or early second century BC, Anaxandridas is known from Plutarch and scholia to Euripides and Aristophanes as the author of a work entitled *On the Offerings Stolen from Delphi*.⁶³ Onomastic data support the ethnic given by the scholiasts: Anaxandridas is an overwhelmingly Delphian name.⁶⁴ Jacek Rzepka is persuasive in identifying the author of *On the Offerings Stolen from Delphi* as the Anaxandridas who served as city councillor (*bouleutes*) ca. 220 BC and archon around a decade later, also appearing as witness and guarantor in several texts recording sacred manumissions.⁶⁵ If at least some of his namesakes are relatives then our author comes from a distinguished local family with

⁶¹ *FGrHist*/BNJ 396 F2, 4, 10. ⁶² *FGrHist*/BNJ 396 F1, 11, 23–4.

⁶³ *FGrHist*/BNJ 404; the *terminus post quem* is Polemon of Ilium (early second century) who wrote *Against Anaxandridas*.

⁶⁴ *Schol. in Eur. Alc.* 1 (*FGrHist* 404 F5). Eighteen of twenty-nine individuals named Anaxandridas listed by the *LGP*N are from Delphi (*LGP*N 3b s.v. Ἀναξανδρίδας nos. 1–18; of the remaining eleven, four are from Knidos (*LGP*N 5b), three from Kamiros on Rhodes (*LGP*N 1) two from Sparta (*LGP*N 3a), one from Cos (*LGP*N 1) and one from Cyme (*LGP*N 5a).

⁶⁵ Rzepka 2009: Biographical Essay. *bouleutes*: *FD* III 1.39.4, 41.4, 42.5, 115.6–7, 120.8; *archon*: *FD* III 2.85.8, 3.382.6, 382bis.6, 4.238.3 (restored); in manumissions: *SGDI* 2010.14 (witness), 2041.4 (guarantor), 2240.5 (guarantor).

a long-standing connection to civic and cultic administration. Inscriptions from Delphi show its members active at the heart of public life from the 320s to the 120s BC; as well as archon and *bouleutes*, the offices held by the various men named Anaxandridas include prytanis, *tamias* (treasurer), *grammateus* (secretary) and *hieromnemon* (magistrate in charge of temples).⁶⁶

Time has been less kind to Anaxandridas' work than that of Semos: from at least four books, only five securely attributed fragments of *On the Offerings Stolen from Delphi* remain.⁶⁷ Nonetheless, the title alone attests to its concern with Delphi's sanctuary, and this is confirmed by the topics of the surviving fragments, which all relate to the workings and history of Apollo's shrine: the Pythia's oracular responses, Delphic votives (a large deposit purportedly made by Lysander and a stem of silphium dedicated by a Libyan tribe), and the story of Apollo slaying the dragon Python.⁶⁸ Anaxandridas of Delphi thus stands as another example of the elite local individual whose privileged position gave him the knowledge and authority to represent his polis and its sanctuary in his writings as well as in his public offices. Of course, neither Delos nor Delphi was a 'standard' polis, due to the panhellenic importance of their sanctuaries; given the international connections and interests of both these communities, the focus of Semos and Anaxandridas on their respective cultic centres might be much less 'local' than it appears. Yet similar patterns of activity can be traced for individuals operating far from these panhellenic centres.

Many *peri patridos* writers are more elusive figures than Semos or Anaxandridas, known to us today as little more than names and

⁶⁶ One Anaxandridas was prytanis in 324 BC and *tamias* in 321/0 (*FD* III 5.61; *FD* III 5.78); Anaxandridas son of Aiakos (mid-second century) was *grammateus* (*SGDI* 2182; 2184; 2187; 2190; 2202) and *bouleutes* (*FD* III 4.171 and 169); an earlier *bouleutes* (*FD* III 1.395) is either the prytanis of 324 or another Anaxandridas, who served as *hieromnemon* in the 270s (*CID* 4.22; 23; 24y). Cf. Rzepka 2009: Biographical Essay.

⁶⁷ With Rzepka I exclude F6–7: F6 belongs to Anaxandridas the comic poet; nothing in F7, attributed to an 'Alexander', gives a reason to make a link with Anaxandridas (Rzepka 2009). I have also excluded F8, from a work of *On Lykoreia* also attributed to 'Alexander'; Rzepka's argument that this fragment should be accepted because Alexander Polyhistor's authorship seems unlikely and the fragment relates to a village on Mount Parnassos does not seem to me persuasive.

⁶⁸ *FGrHist*/BNJ 404 F1–5.

titles. Moving east from Delphi to Euboia, Aristotle of Chalkis is much harder to pin down than his more famous namesake. The author of a work *On Euboia* cited by Strabo and Plutarch for Euboian local geography, history and overseas settlement, he was probably active in the late fourth or early third century, but nothing is known of his life.⁶⁹ On the opposite edge of the Greek mainland, even more obscure is Harmodios of Lepreon, who wrote about the customs of neighbouring Phigaleia, some ten kilometres away in the Arcadian mountains. The work and Harmodios himself are known only from three quotations in Athenaeus; Jacoby assigned him to the Hellenistic period on the basis of their content, but even this rough date is not without question.⁷⁰

Other local writers are attested only in the epigraphic record, where honorific inscriptions illuminate their subjects' value to their polis but often leave the rest of their lives in shadow. Far from Arcadia, on the north shore of the Black Sea, an inscription from the third century BC celebrates one Syriskos of Chersonesos for his 'carefully written up' account of the appearances of the local form of Artemis and the privileges afforded to the city by the Bosporean kings.⁷¹ Syriskos' work, we learn, won him the praise of his city and a golden crown, but we can only guess at its contents, or his life beyond the moment which the council and people of Chersonesos decided to immortalise on stone. From the east Greek world, another local historian commemorated by his polis is Leon of Samos.⁷² Leon was honoured, according to an inscription from the Samian Heraion, because he 'brought events concerning his homeland into trustworthy histories', but no fragments of his work have survived in the literary tradition and there is as yet no further epigraphic testimony to his

⁶⁹ *FGrHist/BNJ* 423. On Aristotle's date, see Sprawski 2010: Biographical Essay. The citation of his work by Lysimachos of Alexandria offers a rough *terminus ante quem* of 200 BC, but the fourth/third-century dating is somewhat speculative.

⁷⁰ *FGrHist/BNJ* 319. The date is based on the description of frequent contact between Phigaleia and Messenia, more likely to reflect the period after 370 BC, and the use of the spelling Phialia in F3, which only came into use in the third century. The first criterion only gives a rough *terminus post quem*; the second is shaky: elsewhere Athenaeus uniformly uses the spelling Phigaleia, including for the title of the work, which makes it more likely that the latter spelling is original to Harmodios.

⁷¹ *IOSPE I*² 344. On Syriskos, see further Rostovtzeff 1919; Dillery 2005: 519–21.

⁷² *FGrHist/BNJ* 540; cf. Dillery 2005: 512–13.

existence.⁷³ Similar figures from Asia Minor include Kreophylos of Ephesus, whose *Annals of the Ephesians* is cited by Athenaeus, and Philippos of Theangela, whose work on Karia was used by Strabo, Plutarch and Athenaeus.⁷⁴

Occasionally, instead of attestations of single individuals a source offers a broader glimpse of intellectual production within a particular community. One example is the so-called Lindian Chronicle, a list of votive offerings and accounts of miraculous appearances of Athana (the local form of Athene) which was inscribed on a stele set up in 99 BC in her sanctuary at Lindos, Rhodes. The decree which introduces the main text states that the inscription was designed to record for posterity ‘whatever is fitting about the offerings and the visible manifestations of the goddess’ (ἅ κα ἦ ἀρμόζοντα περὶ τῶν ἀναθεμάτων καὶ τῶν ἐπιφανείας), since many of the earlier votives had ‘been destroyed through time’ (διὰ τὸν χρόνον ἐφθάρθαι).⁷⁵ The compilers of the account were instructed to consult written sources, and these are duly cited in support of each recorded offering or epiphany. Thanks to these detailed source citations and the prosopographical data available from the rich epigraphic record at Lindos and elsewhere on the island, it is possible to gather information about a number of writers on Lindian and Rhodian topics, many of whom appear to fit the same mould as Semos or Anaxandridas.

The first of these are the compilers of the Chronicle, Timachidas son of Hagesitimos and Tharsagoras son of Stratos. Timachidas and his father, who was the proposer of the decree, are explicitly marked as local by the demotic *Lindopolitas*, and their family can be traced in the epigraphic record at Lindos over several generations.⁷⁶ The Timachidas of the Chronicle is likely to be

⁷³ περὶ πάτρας πράξις εἰς πινυτὰς ἀγαγεν ἱστορίας (*Heraion Inv.* no. 197: 8–9).

⁷⁴ *FGrHist/BNJ* 417, 741. Kreophylos has a *terminus ante quem* of ca. 190 BC; according to Dowden 2008, a date in the third century is suggested by the archaising name ‘Kreophylos’ (characteristic of Hellenistic tastes) and the choice of Ephesian local history, likely to reflect the city’s refoundation and increasing importance from the end of the fourth century onwards. Philippos has been dated between the time of Alexander the Great and the end of Theangela’s independence (Laqueur 1938).

⁷⁵ *I.Lindos* 2 A.7–8, 4.

⁷⁶ Of twenty *LGPN* entries for Hagesitimos and thirteen for Timachidas, in each case all but one are from the island of Rhodes. Hagesitimos is not, as Higbie (2003: 19) translates, ‘son of Timachos’: Τιμαχίδα is a Doric genitive of Τιμαχίδας (which also

the man whose bravery in naval warfare is commemorated in a Lindian inscription from 88–85 BC, and probably also the Lindian who was *prophatas* at Rhodes in 76–75 BC.⁷⁷ If the latter is not the Timachidas of the Chronicle then he is almost certainly a close relative, and his religious office forms one indication of the family's involvement in local cult. Further evidence for their cultic connections is provided by an earlier Hagesitimos son of Timachidas, perhaps the great-grandfather of the compiler, who was *hierothyas* (sacrificing priest) at Lindos in 148 BC.⁷⁸ If this Hagesitimos is the man whose adopted son's name is partially preserved in the priest list as *hierothyas* of Apollo Pythios in 121 BC, then the hierothyte in the lacuna may be another Timachidas, the grandfather of the Chronicle compiler.⁷⁹ A Pausanias son of Hagesitimos, possibly the younger brother of the Timachidas of the Chronicle, was eponymous priest of Athana Lindia in 77 BC.⁸⁰ The often-forgotten second compiler of the Chronicle, Tharsagoras, is a more obscure figure, but probably from a similar background: an earlier homonym appears in two lists of Lindian priests from the mid-second century.⁸¹ Both compilers, then, were members of families prominent in the cultic and political life of Lindos. Unless Timachidas is the Rhodian poet whose eleven-book epic on dinner parties is cited by Athenaeus, neither man is attested beyond the local context, and the Lindian Chronicle is the only surviving example of their scholarship.⁸²

The individuals whose writings are cited as sources in the Chronicle fit a similar profile. Herodotus is the only one of

makes more sense given the name of Hagesitimos' son). On the priestly offices held by the family, see Fraser 1953: 36.

⁷⁷ Cf. Blinkenberg 1941: 156; Higbie 2003: 62–3. This Timachidas is also identified as Λινδοπολίτας.

⁷⁸ Blinkenberg (1941: 154) believes this refers to the Hagesitimos of the Chronicle inscription.

⁷⁹ *I.Lindos* 247 ii.17–18 reads [...]δας Καλλικλεῦς | [κ]αθ' ὁθεσίαν δὲ Ἀγησιτίμου. Six letters are missing; [Τιμαχι] fits perfectly. This is probably too early to be the Timachidas of the Chronicle, but it is not impossible.

⁸⁰ The chronology works well; most priests of Athana Lindia were in their fifties or sixties (Blinkenberg 1938: 20), and Timachidas must have been at least in his late teens or early twenties in 99 BC.

⁸¹ *I.Lindos* 220.12 (priests of Artemis); 223.15 (priests of Poseidon Hippias).

⁸² Ath. 1.5b, 3.82d, 7.283c, 15.682c, 15.684f.

twenty-one cited authorities to receive an ethnic;⁸³ it is highly likely that the others were local to Rhodes or Lindos itself, and most of them are known only for writings on Rhodian topics (many only from this inscription). For example, Zeno, an author of *chronikai syntaxeis* (an annalistic/chronographic account) cited regarding dedications by Pyrrhos of Epiros (r. 319/318–272), is probably the Rhodian contemporary and correspondent of Polybius whose work was also used by Diodorus.⁸⁴ Polybius' critique of Zeno's writings neatly captures the frequent intersection in antiquity between political and intellectual activity and authority: Zeno and his fellow Rhodian Antisthenes are excessively patriotic, but their works are worthy of notice because 'they were active in politics, and overall they put together their accounts not for the sake of profit, but for honour, and as the duty of a statesman'.⁸⁵

Also cited in the Chronicle entry on Pyrrhos' gifts are two other writers of *chronikai syntaxeis* who are not known from literary sources and almost certainly Rhodian: Hagestratos and Hagelochos.⁸⁶ Bearers of both names cluster strongly on Rhodes, including several prominent Lindians and a number of priests.⁸⁷ One Hagestratos was priest of Athana Polias and Zeus Polieus at Kameiros in the mid-third century, another served as priest of Apollo at second-century Ialysos, and a third is named as priest of Halios at Rhodes in 129 BC.⁸⁸ Notable Hagelochoi with connections to local cult include a Lindian who contributed funds towards the restoration of Athana's ornaments in 325 BC and a priest of Athana at Kameiros around 251 BC.⁸⁹ Similar local and/or cultic connections can be reconstructed for most of the remaining writers. The unusually plentiful source citations in the Chronicle, combined

⁸³ [Θ]ούριος; *I.Lindos* 2 C.38.

⁸⁴ *FGrHist/BNJ* 523; Walbank 1967: 517–18. On *chronikai syntaxeis* see Funke 1994.

⁸⁵ Polyb. 16.14.3. ⁸⁶ *FGrHist/BNJ* 516 and 517.

⁸⁷ Twenty-seven of the forty-nine Hagestratoi listed by the *LGP*N are from Rhodes or the Peraia, almost all from the Hellenistic period (*LGP*N 1 s.v. Ἀγέστρατος nos. 1–28); another (no. 28) is from the neighbouring island of Telos. The region with the next largest cluster is Delphi (three individuals; *LGP*N 3b). Seventeen of forty-six Hagelochoi in the *LGP*N are from Rhodes or the Peraia (*LGP*N 1 s.v. Ἀγέλοχος nos. 2–18); the only other regional cluster is in Thessaly (four individuals; *LGP*N 3b).

⁸⁸ *Tit. Cam.* 30 ii.4, *IG XII.1* 730.20, 890.29. The latter two may conceivably be the same individual.

⁸⁹ *I.Lindos* 51 ii.37; *Tit. Cam.* 5 ii.23, 29.11.

with its specialised topic which naturally lent itself to a local source base, mean that this inscription offers a rare insight into vibrant traditions of local scholarship. Such traditions no doubt existed in many Greek communities, but often remain invisible to us because they rarely made their way into the epigraphic record or attracted the attention of writers whose work was transmitted beyond antiquity.

The parallel lives of Semos of Delos and Anu-aḥa-ušabši represent only one of many sets that could be traced between Greek and Babylonian scholars of the Hellenistic period. Across the Greek world it is possible to identify many *peri patridos* writers who, like the scholars of the Rēš, came from families with a significant stake in local life over multiple generations, often with a link to local cults. Their scholarship was intimately connected with their role in the political and religious spheres of their community, making use of specialised knowledge to which their offices gave them access, and dealing with topics of local concern: the history of their polis, the prestige of its shrine, the power of its local deity.

This does not, of course, mean that these men or their writings never transcended their local contexts. Writers whose work was eventually cited by Strabo, Plutarch, Athenaeus and others certainly had an impact beyond the immediately local. For those whose activity is only attested in the epigraphic record of their local community, like Leon of Samos or many of the Rhodian writers cited in the Lindian Chronicle, it is easier to imagine a locally bounded career. Perhaps these are the truly local intellectuals of the Hellenistic Greek world, whose work never reached the eyes of Athenaeus or Plutarch but were honoured as heroes by their own or neighbouring poleis. The limitations of our evidence invite unease: we are always just one new inscription away from proof that a given individual was active beyond his home city. Nevertheless, the strength of the pattern suggests that Clarke's 'local . . . who wrote *περί πατρίδος*' with primarily local impact is an important feature of the Greek intellectual landscape. We do not need to imagine that these men never left their own communities or put forward their ideas on a wider stage, simply that their intellectual activities, like those of their Babylonian contemporaries, tended to remain practically and conceptually centred on their own homeland.

7.1.2.3 *Local Narratives, Panhellenic Aspirations*

As in Babylonia, ‘local’ when applied to the work of these Greek writers does not mean ‘parochial’. Many Greek local historians’ writings have broad temporal and geographical frameworks and show engagement with supra-local traditions. Semos, for instance, dealt with other Aegean islands in the *Delias* and his lost *Nesias*, and more distant regions in *Periodoi* and *On Pergamon* (if the latter two works are correctly attributed to him by the Suda).⁹⁰ Anaxandridas went well beyond what was strictly necessary for a description of votives, dealing with broader aspects of Delphic history and religion, while Aristotle of Chalkis’ Euboian interests extended geographically as far as the Pillars of Herakles, and chronologically from the settlement of Euboia in the mythical past down to at least the sixth century BC.⁹¹ Perhaps most overarching of all, the dedicants and offerings described in the Lindian Chronicle encompass the entire Mediterranean world and Greek history from the days of Herakles to the Hellenistic present.

The expansive horizons of Greek local historians were not just a result of broad thematic interest; local historians often seem to be engaging creatively with pre-existing traditions, adding or counterposing local versions. The claim from the honorific inscription for Leon of Samos that he ‘brought events (*praxeis*) relating to his homeland into trustworthy histories’ encapsulates the integration of local figures and events into broader historical narratives and frameworks which is characteristic of many of these works.⁹² Sometimes this was a case of responding to alternative accounts with contemporary currency: for instance, Semos’ version of the story of Herakles and the Boreadai is different from those of his fellow Delian Phanodikos and Apollonius of Rhodes, suggesting that this particular myth was a topic of live debate in the early Hellenistic period.⁹³ Anaxandridas’ *On the Offerings Stolen from*

⁹⁰ *FGrHist/BNJ* 396 F2 (Psammetiche), 5 (island of Hekate), 6a–b (Ikaros), 13a–b (Naxos), 17 (Kinaros). On the *Nesias*, see Ceccarelli 1989: 924–8. *Periodoi* and *On Pergamon*: *FGrHist/BNJ* 396 T1.

⁹¹ Anaxandridas: *FGrHist/BNJ* 404 F3, 5. Aristotle: *FGrHist/BNJ* 423 F6 (Pillars), 3 (colonisation of Euboia), 5 (death of Kleomachos of Eretria).

⁹² περί πάτρως πράξεως εἰς πινυτὰς ἀγαγεν ἱστορίας (*Heraion Inv.* no. 197: 8–9).

⁹³ *BNJ* 396 F19 with commentary.

Delphi may also have been responding to competing traditions about the offerings in question; perhaps it was designed to correct other accounts, contest ownership claims by other sanctuaries or even seek restitution for the purportedly stolen votives. It certainly provoked a reaction from Polemon of Ilium, a periegetic writer who in turn composed a work entitled *Against Anaxandridas*.⁹⁴ In other cases, authors sought to weave local narratives into those of texts of enduring panhellenic prestige, no doubt to raise the profile of their own community. A number of Homeric figures feature in the Lindian Chronicle's offering list as dedicants of Trojan War spoils, exploiting what Carolyn Higbie has called 'holes in Homer' to bring Homeric heroes to Lindos.⁹⁵ The gaps in the narratives of the *Iliad*, *Odyssey* and other Epic Cycle poems afforded many opportunities for such creative supplementation. Menelaus, Meriones and Teukros could be imagined as having passed by – and naturally, honoured Athana – in the course of their voyages to or from Troy, thereby bestowing extra prestige upon Lindos and its temple.

As the panhellenic dimension to their work implies, Greek local scholars did not lack access to external sources or traditions any more than their Babylonian counterparts. In fact, the broader environment in which men like Semos, Anaxandridas and Timachidas composed their writings was characterised by a greater mobility of practitioners and resources than the relatively closed circles of cuneiform scholarship in Hellenistic Babylonia. At the highest level, that mobility was driven by the opportunities for patronage at the royal courts and their libraries, which we examined in [Chapters 4 and 5](#). At civic level, access to texts and traditions from elsewhere was also facilitated by the itinerant poets and other performers who moved between poleis, competing in local festivals and carrying out particular commissions. Some toured solo, like Demoteles of Andros who was honoured at Delos because he 'recorded the native stories'; others moved in organised associations like the *technitai* of Dionysus.⁹⁶ Combining

⁹⁴ On Polemon, see Donohue 2012 with bibliography.

⁹⁵ Higbie 2001: 114–18; 2003: 222–7.

⁹⁶ On itinerant poets, see the papers in Hunter and Rutherford 2009, especially Petrovic 2009; Clarke 2005 examines itinerant historians; Thompson 2007: 121–6 looks at

their expertise with local research to celebrate the cities they visited, travelling artists played an important role in the cultural (and often also political) life of the poleis, and local experts probably often interacted with them.⁹⁷

These itinerant specialists and the international dimension they brought to local intellectual culture find no parallel in the scholarly communities visible from the cuneiform sources: Sumero-Akkadian intellectual culture of the Late Babylonian period no longer possessed the plethora of performance contexts which fostered the travelling Greek poets, philosophers and scholars of the Hellenistic world. No doubt there were itinerant experts of various kinds in Babylonia too, and they may have interacted with the temple scholars, but their activities are not captured by the narrow beam of the cuneiform sources. This is one area where the worlds of the Babylonian and Greek scholars we are exploring cannot be aligned precisely.

Yet this more overarching difference actually strengthens the link between the Greek and Babylonian scholars whose work we have examined: their local focus was deliberate and reflected the desire to preserve and perpetuate local traditions and practices rather than a lack of contact with the outside world. Against a background of constant movement and contact with experts and traditions from elsewhere, cases of predominantly local citation like the Lindian Chronicle seem more likely to result from the specialised nature of the work's content than a lack of access to external sources. Where external perspectives were required, it seems that sources could be obtained or consulted from further afield: in the second-century inscription recording Rhodian arbitration between Samos and Priene, for example, the arbitrators cite historical works from Samos, Chios, Miletus and Ephesus in support of their decision.⁹⁸ Lindian and Rhodian authors may also have been deliberately foregrounded at Lindos as a mark of

cultural performances by civic envoys sent on diplomatic business and the importance and scope of *paideia* across the Hellenistic Greek world. Demoteles: πεπραγμένα τεύται περί τε τὸ ἱερὸν καὶ τὴν πόλιν τὴν Δηλίων καὶ τοὺς μύθους τοὺς ἐπιχωρίους γέγραπεν (FGrHist/BNJ 400 T1). Given the competitive world of local mythography, one wonders whether ἐπιχωρίους might also have the sense 'native versions'. On the Hellenistic *technitai* of Dionysus see Le Guen 2001.

⁹⁷ Clarke 2005: 120–3. ⁹⁸ I.Priene 37.

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local pride.⁹⁹ Herodotus was a natural exception: given his pan-hellenic status, his agreement with the local version (he is not cited alone, but together with the Rhodian Polyzalos) conferred greater authority on the latter. Just as the copying statements of the Uruk tablets situated their authors within a venerable tradition of local scholarship, Timachidas and Tharsagoras appear in the Chronicle as the latest in a long line of local experts with authoritative knowledge about their island's past.

The parallel lives of Semos and Anu-aḥa-ušabši do not always run close together, and neither do the intellectual profiles of the other Greek and Babylonian individuals and communities reconstructed here. Differences in relative literacies, the socio-cultural contexts of intellectual activity, and attitudes towards the dissemination of knowledge should not be trivialised. Nevertheless, the circumstances of Greek scholars in communities around the Hellenistic Mediterranean in many ways bear closer resemblance to those of cuneiform scholars in Seleucid Babylonia than to the denizens of the Lyceum or the Library of Alexandria. These scholars were local, proudly so, and active in the political and religious life of their cities. Their intellectual interests were by no means parochial, and they engaged with outside traditions both past and present, but their scholarship was focused on their local environment: they wrote about matters crucial to the identity of the community in which they and their families had had a prominent role for generations. It is here, with the exploration and assertion of local identity, that we can also draw a more powerful connection between these local intellectual specialists.

7.2 Hellenistic Local Histories in Greece and Babylonia

Anu-aḥa-ušabši, Semos and their respective communities faced a similar set of large-scale changes arising from the much broader

⁹⁹ As also in the Cretan decrees examined by Thompson, in which the works of local poets were performed by the Tean envoys (Thompson 2007: 125), and the second-century 'Pride of Halicarnassus' inscription, which contains a catalogue of local writers as part of its proof of Halicarnassus' claims to honour (*editio princeps* Isager 1998; revised editions and commentary: Lloyd-Jones 1999a and 1999b; see also Stevens 2016 on the imperial localism of this text).

political context they shared: the imposition of Macedonian rule over much of the Greek world and the former territories of the Persian empire. In the cities of Babylonia, the conquest of Alexander and his Seleucid successors meant the arrival of new foreign rulers and settlers from the west, changes to administrative personnel and practices, and possible interference in cultural life. Meanwhile, across the Greek mainland, Aegean and Asia Minor formerly independent poleis or those newly ‘freed’ from Persian rule found themselves under varying degrees of royal control, from diplomatic pressure to hegemonic interference to direct domination. Faced with potential or actual threats to their status and autonomy, these communities needed to assert their rights and identities, and one way in which they did so was by looking back in time, using historical narratives about their past status and treatment as a means of voicing and framing present concerns and future aspirations. The historical writings of Greek and Babylonian local scholars of the Hellenistic period exhibit recurring *topoi* and themes which respond precisely to the realities of Hellenistic imperialism, and arguably served the same purpose: to assert the prestige and status of their community in front of both local and imperial audiences.

Although Greeks were writing local history before Alexander conquered the world and continued to do so after the fall of Cleopatra, the extraordinary proliferation of Greek local historiography in the intervening centuries marks it as a particularly ‘Hellenistic’ phenomenon. The types of historical narrative that were created and the contexts in which they were produced and deployed also indicate that Hellenistic Greek local historiography is intimately related to the political and cultural conditions of the period. Across the Greek-speaking world, communities whose political independence was curtailed in the present remembered (or invented) illustrious pasts in order to assert their continuing importance in a world now dominated by new imperial superpowers.

Various modern scholars have pointed to the importance of local historiography for Hellenistic poleis, not only in terms of their self-understanding but also as a means of negotiating relationships with each other, the Hellenistic kings, and eventually also Rome.

In particular, Angelos Chaniotis, Laura Boffo and Katherine Clarke have studied the cultural and political operations performed by Greek historiographical inscriptions, which celebrated (or created) on stone a glorious past for communities with little political clout in the present.¹⁰⁰ Clarke has also highlighted the way in which itinerant local historians could function as political ambassadors for their communities on the international stage.¹⁰¹ Meanwhile, as well as acknowledging the diplomatic uses of local histories abroad, Rosalind Thomas has stressed their community-building function at home and the ‘simple love of homeland’ to which these narratives also testify.¹⁰² Within the domain of local historiography, John Dillery has singled out sacred histories as an especially important medium of community self-definition and self-promotion.¹⁰³

In his treatment of Berossus and Manetho, Dillery has extended this interpretation of Hellenistic local historiography across cultural lines, presenting a compelling argument that Berossus and perhaps also his Egyptian counterpart should be aligned with local historians of the Greek world in terms of the works they produced and the motivations behind them. Studies of Berossus’ relationship with Greek historical writing have tended to focus on ‘high’ Greek historiography and ethnography, examining his apparent corrections of Herodotus, Ctesias and other Greeks writing about the Near East. Dillery stresses instead the similarities between fragments of the *Babyloniaca* and Greek local historiography. Like writers from Greek cities across the Hellenistic world, Berossus offers us a view of the past which centres on and celebrates his own city, Babylon, sometimes departing from established Babylonian narratives in order to do so. For example, as we saw in [Chapter 2](#), his account of the Flood diverges from traditional Mesopotamian accounts in implying that Babylon was an antediluvian city; he states that the survivors of the Flood ‘returned’ there, taking with them the knowledge from before the Flood which had been buried at Sippar.¹⁰⁴ This, Dillery argues,

¹⁰⁰ Chaniotis 1988; Boffo 1988; Clarke 2008: ch. 6. ¹⁰¹ Clarke 2005.

¹⁰² Thomas 2014: 258–9. ¹⁰³ Dillery 2005.

¹⁰⁴ *FGrHist/BNJ* 680 F3a, 3b, 4a, 4b; cf. page 99.

can be compared with the local appropriation of panhellenic myths by Greek local historians.¹⁰⁵ Importantly, Dillery also sees Berossus and Manetho as motivated by the same factors that stimulated local historiography in the Greek world: a loss of political power, and domination by non-native regimes. Both writers ‘spoke for ancient communities, both at the local and regional levels, that were navigating the difficult waters controlled by transregional powers, with their only help provided by the suasion of cultural legacy and the legitimacy it conferred’.¹⁰⁶

These ancient communities were not only spoken for by Greek voices, however. The view of local historiography which Dillery has applied to Berossus can be extended further, to Akkadian historiographical texts produced by Babylonian scholars during the same period. Dillery himself goes beyond a Hellenic context in his discussion of ‘authentication stories’ about the miraculous survival of native scholarly or religious texts. Noting that such stories tend to cluster in periods where ‘national identity is at risk because of the coercive presence of non-native, imperial power’, he draws a parallel between Berossus’ narrative about the burial and recovery of antediluvian knowledge and similar stories in Jewish and Egyptian texts, including the rediscovery of the book of the law in 2 Kings 22 and the finding of the magical book in the Demotic story of Setne.¹⁰⁷ The same kind of cross-cultural links can be made between Greek and Akkadian historical texts from the Hellenistic period. The remainder of this chapter seeks to demonstrate this, through a case study centred on two examples of local historiography, one Greek, one Babylonian. Close comparison shows that, despite their differences, these two texts exhibit parallel themes, concerns and strategies which can be linked to contemporary political realities; furthermore, similar parallels can also be drawn between other Greek and Akkadian historiographical texts of the Hellenistic period. Overall, the chapter suggests that it is fruitful to view Hellenistic local historiography in cross-cultural perspective, as a means by which

¹⁰⁵ Dillery 2015: 136–48, 183–92. For Manetho the case is less clear: although there are some hints of a particular interest in Heliopolis, it is hard to detect a specific local orientation in what survives of his work (Dillery 2015: 181–2).

¹⁰⁶ Dillery 2015: 192. ¹⁰⁷ Dillery 2015: 123–33, 138–45.

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communities writing in different languages and within different cultural and intellectual frameworks sought both to define themselves and to communicate and negotiate with the new powers of the day.

7.2.1 Two Hellenistic Chronicles

For our example of Greek local historiography, we return to the Chronicle of Lindos. We examined this composition earlier as a source for the prosopography of local intellectual life on Hellenistic Rhodes; here it is its content and socio-political context which will be of interest.¹⁰⁸ On the stela, the decree commissioning the inscription is followed by three columns containing two texts which enact its instructions. First comes the list of offerings: in predominantly chronological order, it records dedications made at Lindos by heroes, kings and locals from mythical times to the early Hellenistic period. All the entries follow the same structure, giving first the dedicant's name, then a description of the object, together with any inscription it bore, and finally a citation of any written sources from which the compilers took their information about the item in question. For example, the first entry states that the eponymous hero Lindos dedicated a *phiale* of an unknown material, with the inscription 'Lindos to Athana Polias and Zeus Polieus'. Gorgon, author of *About Rhodes*, and letters from two priests of Athana named Gorgosthenes and Hieroboulos are cited as sources.¹⁰⁹ The majority of the offerings listed are fictitious in the sense that they are attributed to mythical figures, although this of course does not preclude the existence of votives believed to have been dedicated by these individuals. The [final section](#) of the inscription consists of an account of three miraculous appearances of Athana which saved the Lindians from impending disaster: two sieges by external powers (the forces of the Persian king Darius

¹⁰⁸ *I.Lindos* 2. First edition: Blinkenberg 1912. Other editions and commentaries: Blinkenberg 1915; 1941; Jacoby in *FGrHist* 532; Chaniotis 1988 T13; Higbie 2003: 200 (essentially following Blinkenberg's text, with translation, but note the criticisms in Gabrielsen 2005 and Bresson 2006). Historical discussions: Higbie 2003: 204–42; Dillery 2005: 514–19; Bresson 2006; Dillery 2015: 183–92.

¹⁰⁹ *I.Lindos* 2 B.2–8.

and Demetrius Poliorcetes respectively) and pollution caused by a suicide in the temple.¹¹⁰ The lower part of the stela is broken away, so it is possible that further offerings and epiphany accounts were originally included.

‘Chronicle’ is not an unproblematic classification for this text. Jacoby criticised Christian Blinkenberg’s designation of it as a ‘Tempelchronik’, since it did not display the formal features he thought characteristic of these texts in the Greek world, nor does the inscription present the kind of unified chronographic document which the English ‘chronicle’ naturally calls to mind.¹¹¹ At the same time, the alternative adopted by Jacoby and others, ‘Lindian *Anagraphe*’, highlights the public character of the inscribed account but does not tell us what kind of account it is: *anagraphe*, ‘record, description’, is not a genre classification, and is used in the decree itself simply to refer to the inscription of the text rather than its composition.¹¹² Like Higbie and Dillery, I retain ‘chronicle’ as the most helpful basic classification. The inscription should certainly be distinguished from self-proclaimed *chronikai*, but ‘chronicle’ in the common English sense of ‘record, register, narrative, account’ is entirely appropriate.¹¹³ ‘Chronicle’ also captures, in a way which *anagraphe* does not, a concern with time which is a key feature of the text. This is not a strictly chronographic work: as Chaniotis has demonstrated, thematic groupings sometimes take precedence over chronological order in the offering list.¹¹⁴ However, as the decree makes explicit, the inscription is designed to counteract time’s destructive effects on the community’s ability to remember its past, while the essentially chronological sequence of donors, progressing gradually from the ancient world of heroes to (almost) the time of the inscription, is constructed to show that the sanctuary’s prestige has endured, and by implication will endure, even the longest spans of time.

¹¹⁰ Darius: *I.Lindos* 2 D.2–59; Demetrius: D.95–115 (rest fragmentary); suicide: D. 61–93.

¹¹¹ *FGrHist* 532 commentary; cf. Blinkenberg 1912; 1915; 1941. ¹¹² *I.Lindos* 2 A.9.

¹¹³ ‘chronicle, n.’ 3. OED Online. June 2012. Oxford University Press (www.oed.com/view/Entry/32576?isAdvanced=false&result=1&rskey=o2ob2l&).

¹¹⁴ Chaniotis 1988: 55.

The second historiographical account is an Akkadian text on a cuneiform tablet which was written a hundred and fifty years earlier and fifteen hundred miles away, in the southern Babylonian city of Uruk. In 251 BC, during Anu-aḥa-ušabši's stint as high priest of the Rēš temple, his son Anu-balāssu-iqbi copied a cuneiform tablet for him. The text it contains, which I shall refer to as the Uruk Chronicle, describes the treatment of Uruk by the kings of the Ur III dynasty, who ruled Mesopotamia at the end of the third millennium BC.¹¹⁵ The tablet may have been part of a longer series covering the whole dynasty, but what survives is principally concerned with the sacrilegious behaviour of King Šulgi (r. 2094–2047) towards the cult of Uruk:¹¹⁶

[The divine Šulgi, king of Ur, son of Ur-Nammu, exercised [ki]ngship over all the lands. He conquered -bangar and Rabsisi, the kings of Subartu, and plundered the [citie]s of the enemy land. He took out as booty the [property] of Esagila and Babylon; he built and perfected the [E]gišnugal, the temple of Šin in Ur; he constructed the wall of Ur and made fi[rm] Ur's foundations. The divine Šulgi, son of a daughter of king Utu-ḫegal of Uruk, with the blind Lu-Nanna, the scholar [...] – there was [ev]il in their hearts! – improperly alte[r]ed the rites of the cult of Anu, Uruk's cultic regulations, the [sec]ret knowledge of the scholars, and put down in writing the [for]ced labour exacted by Šin, lord of Ur. [During] his [re]ign, he composed untruthful stelae, insolent writings, [concerning the rit]es of purification for the gods, and left them to posterity. [But Anu], the king, whose decisions are great, regarded him with anger and [...] his great punishment [...] he clothed his body with [...].¹¹⁷

Šulgi starts his reign well, defeating enemy kings of neighbouring territories and taking booty from them, but then begins to plunder

¹¹⁵ Text, translation and commentary: *SpTU* 1, 2, with further restorations by Wilcke 1982: 143–4; Glassner 2005 no. 48; online editions: <http://oracc.museum.upenn.edu/cams/gkab/P348423>; www.livius.org/sources/content/mesopotamian-chronicles-content/cm-48-kings-of-ur/ (partial).

¹¹⁶ The existence of what seem to be catchlines at the beginning and end of the text suggest that it may be part of what was originally a longer composition, perhaps dealing with all the Ur III rulers; Beaulieu (1993: 50) takes it as such. It is impossible to determine, however, whether *SpTU* 1, 2 is the only surviving tablet from a longer set owned by Anu-aḥa-ušabši, or represents a deliberate selection by him or an earlier copyist. As it is, we can only analyse the tablet as a stand-alone document, but the possibility of a longer series should be borne in mind.

¹¹⁷ *SpTU* 1, 2 obv. 3–20.

the sanctuaries of Babylonia. Aided by the wicked scholar Lu-Nanna, he tampers with the rites of the god Anu at Uruk and attempts to perpetuate his changes through the production of false documents relating to the cult. However, he is eventually punished by Anu in an unfortunately fragmentary section in which both Anu's wrath and Šulgi's unpleasant fate are nevertheless clear from what remains.¹¹⁸ Although it was excavated from a residential area, this tablet was intended to be a votive: the colophon states that it was to be dedicated in the temple for the owner's learning, long life, good health and success.¹¹⁹ As this is a copy of a pre-existing tablet, the text's date of original composition is earlier, perhaps significantly so, but the choice to recopy it indicates its continued relevance in the mid-third century.

As with the Lindos inscription, 'chronicle' is not an entirely straightforward classification for this text. Here the difficulty is not that the composition fails to fit a particular generic classification, but rather the lack of a precise definition of 'chronicle' in an Assyriological context, where the term has tended to be used as an umbrella categorisation for a heterogeneous range of compositions dealing with the past. Responding to John Brinkman's call for a suitable typology, Jean-Jacques Glassner proposed a more fine-grained classification of Mesopotamian chronicles, and a basic tripartite definition as follows: 1) chronicles are written in third person prose; 2) priority is given to time, and 3) brevity is the norm.¹²⁰ The Uruk text meets the first and third criteria without difficulty, but it is less obvious that time is a priority, at least compared with other Akkadian chronographic texts which are structured rigidly around date entries.¹²¹ Although the text mentions kings in regnal order and notes their reign lengths, its running account of Šulgi's reign is structured just as much around locality (Babylon, then Uruk) as time. Here, too, I retain the label 'chronicle', since the term is applicable in its more general sense of

¹¹⁸ *SpTU* 1, 2 obv. 10–21. On the nature of Šulgi's punishment, see pages 356–7.

¹¹⁹ *SpTU* 1, 2 rev. 8.

¹²⁰ Brinkman 1990: 99–100; Glassner 2005: 38, 43–4. Glassner groups the Uruk text with several other compositions in a category of 'Neo-Babylonian chronicles concerning Ancient Kings'.

¹²¹ For Chronicles from the Seleucid period which follow this more rigid chronological structure, see e.g. *BCHP* 1, 5, 9.

a chronologically ordered account, but without any implication that either the Lindos or the Uruk texts belong to a strictly defined genre in their respective contexts or share formal or structural features beyond this basic categorisation.

Indeed, on the face of it, these two documents do not have much in common at all. One is a lengthy inscription on a large, publicly visible stone monument, written in Greek, a language at the time spoken and written more widely than ever before. The other is a short text on a small clay tablet which would have had minimal public visibility, composed in a language and script restricted to a small and dwindling scholarly elite. But the disparities conceal deeper similarities. Classicists and Assyriologists have explored separately the ways in which each text reflects and reacts to its Hellenistic contexts within its own cultural and intellectual traditions. Chaniotis, Higbie, Dillery and others have elucidated the nature and purposes of the Lindian Chronicle in relation to the situation of Lindos and Rhodes in the early first century BC, while Paul-Alain Beaulieu and Antoine Cavigneaux have interpreted the Uruk Chronicle as a product of specific historical circumstances in early Seleucid Uruk.¹²² These studies are nuanced and persuasive, and apart from a few points of qualification, the following discussion does not depart from their interpretations of each individual document. Rather, by adding a cross-cultural element to the analysis, I hope to show that the Lindos and Uruk Chronicles can be, indeed should be, read together as examples of Hellenistic local historiography.¹²³

¹²² Lindos: Chaniotis 1988: 52–5; Higbie 2003; Shaya 2005; Dillery 2005: 514–19; Massar 2006; Clarke 2008: 214–15, 321–5. See also Bresson 2006 for a slightly different interpretation of the Chronicle, Uruk: Beaulieu 1993: 50; Cavigneaux 2005.

¹²³ The Lindian Chronicle has been subjected to cross-cultural analyses before, with regard to Jewish historiography. Momigliano (1982: 228) and Heltzer (1989: 97–8) have seen evidence for contact or influence between Greek and Jewish traditions based on the fact that the beleaguered parties in both the Book of Judith and the Lindian Chronicle give themselves five days before surrendering; one wonders whether the figure of five days might not rather be determined by the human constraint of how long it is possible to survive without water. Heltzer 1992 also attempts to link the Lindian Chronicle with the Old Testament Chronicles, but the similarities adduced are so general as to be unconvincing; even Heltzer admits that there is no evidence for direct influence and is reduced to suggesting that ‘there were apparently some common cultural influences and trends current in the Eastern Mediterranean’ (1992: 141). At present the case for a connection here seems doubtful.

7.2.2 *Paradigmatic Pasts*

Both the Lindos and Uruk Chronicles can be classed as works of historiography with a particular focus on the religious sphere. The Uruk Chronicle presents a historical narrative in which the central concern is the relationship between the kings of Ur and the cult of Anu at the Rēš temple in Uruk, while at Lindos, as Beate Dignas puts it, ‘a list of Athena’s local and famous donors narrates the history of Rhodos’, supplemented by the epiphany accounts which dramatise Athena’s interventions at moments of particular crisis.¹²⁴ The two chronicles are, then, comparable in a general way as works of local historiography which focus on a particular religious institution. But a more detailed examination of their representations of the past and the relationship of those representations to the present in which they were written allows us to connect them more closely.

The key to understanding and linking these two documents is the paradigmatic nature of the pasts they construct. In Greece and Mesopotamia, as in many societies throughout history, the past had a strong exemplary force. Positive and negative models from recent or distant history could be adduced to affirm a community’s sense of identity and to exert pressure on contemporary or future actors to behave in a certain way. This exemplary function of the past tends to be expressed more explicitly in Greek sources than those in Akkadian; one obvious case is that of the Athenian orators, ‘selecting, manipulating, and presenting a past that would . . . bolster whatever collective identity the polis enjoyed, at the same time as supporting particular courses of action for the

¹²⁴ Dignas 2002: 241; cf. Chaniotis 1988: 53–4; Dillery 2005: 514–19; Clarke 2008: 322–5. Shaya 2005 looks at the Chronicle, in particular the collection of objects assembled in the offering list, as evidence for the Hellenistic temple as ‘the community’s “museum”, a sacred-historical space that both legitimated and interpreted material traces of the past’ (423). On the interplay between the offering list and epiphany narratives see especially Platt 2011: 166–9. Reacting against the idea that the Chronicle is in essence a history of the sanctuary, Bresson (2006: 541–6) has suggested that the aim was simply to record all important offerings that were no longer visible. Yet as ‘important’ implies, and as the decree explicitly states, this was a selective process: the compilers were to record ‘whatever is fitting’ from the information available. For a restatement of the case for seeing the Chronicle as a work of local historiography, see Dillery 2015: 183–192.

present and future'.¹²⁵ But the more implicit use of the past as *exemplum* in Akkadian texts does not make it any less forceful. Since, as Glassner puts it, history in Mesopotamia was 'made up of recurrent events and peopled with avatars', recounting (or inventing) ancient events could have a precise and pointed contemporary reference.¹²⁶ There are numerous examples of this in Mesopotamian literature. For example, Marc Van de Mieroop has shown that both positive and negative portrayals of Sargon of Akkad (r. 2334–2279 BC) in first-millennium texts were likely intended to function in part as commentaries on his later namesake, Sargon II of Assyria (r. 721–705 BC), while Glassner has highlighted cases in the Babylonian Chronicles where 'the questions raised by chronicles of former kings were really questions pertinent to the present'.¹²⁷

Although shaped by their respective cultural backgrounds, the Lindos and Uruk chronicles offer parallel versions of the past with comparable paradigmatic functions: to establish the enduring importance of their sanctuary, and by extension their local community, and to promote a pattern of respectful treatment from the wider world. The Lindian Chronicle achieves this through both positive and negative exempla. The main part of the text in terms of the space it occupies on the stele (two of the three columns below the decree) is the offering list, a series of positive exempla covering hundreds of years which is designed to prove that the great and the good have honoured Athana Lindia – and hence Lindos itself – since time immemorial. The roll-call of demigods, Homeric heroes and famous historical rulers who all stopped to dedicate at Lindos retrojects the glory of Lindian Athana back to the city's foundation, establishing a continuous pattern of reverential behaviour towards the goddess' sanctuary which leads inexorably towards and beyond the present day and sets up expectations for future action.¹²⁸ In the remaining column, the preserved epiphanies, all of relatively recent date, dramatise the rewards for the Lindians' own devotion: Athana's ongoing

¹²⁵ Clarke 2008: 303. ¹²⁶ Glassner 2005: 10.

¹²⁷ Van de Mieroop 1999; Glassner 2005: 85–7.

¹²⁸ Cf. Shaya 2005: 429: 'The catalogue implied that the temple ... existed before the Trojan War; its treasure had been carefully cared for from the time of the hero Lindos.'

concern for them, and her privileged relationship with her priests, to whom she continues to manifest herself personally at times of crisis. Indeed, Verity Platt suggests that the focus on the recent past in the epiphany narratives is a complement to the temporal depth of the offering list, so that ‘epiphany is shown to have immediate significance for the city’s security, status and international relations’.¹²⁹ These narratives also complement the positive exempla of the offering list by dramatising the consequences of failing to respect Lindos and its tutelary goddess. In the second epiphany, Darius’ general Datis underestimates Athana Lindia to his cost and the Persian conquest of Rhodes is thwarted by her intervention. Datis’ recognition of his folly and lavish offerings to the goddess whose power he had initially scorned further underlines the positive paradigm of reverent benefaction established through the offering list.¹³⁰

The Uruk Chronicle, meanwhile, presents a single exemplum which moves from positive to negative in a vivid illustration of the cultic duties of the good king and the punishment for failing to adhere to the paradigm. Initially, Šulgi acts like the ideal Mesopotamian ruler, conquering the kings of the enemy land of Subartu and plundering their country.¹³¹ However, in removing the treasures of Esagila in Babylon, tampering with the rites in Uruk and promoting the cult of Sîn over that of Anu – portrayed here as head of the Mesopotamian pantheon, as indicated by his title ‘king’ – Šulgi falls quickly into the role of the archetypal bad king, incurring the wrath and vengeance of Anu.¹³² Although the specification of Šulgi’s punishment falls in the break, the use of the phrase ‘he (Anu) clothed his (Šulgi’s) body’ suggests a skin disease, and the traces on the tablet may support a tentative restoration of *saḥaršubbû*, leprosy.¹³³ This disease was typically associated with the god Sîn (‘punishment of Sîn’ was a

¹²⁹ Platt 2011: 169. ¹³⁰ *ILindos* 2 D.1–59. ¹³¹ *SpTU* 1, 2 obv. 3–6.

¹³² *SpTU* 1, 2 obv. 7–18 (Anu’s name in obv. 18 is restored). It is unclear whether Anu’s exalted position here represents historical memory (Anu was originally the head of the Mesopotamian pantheon, and Uruk is his home city), or an anachronism based on his elevation to the top of the Uruk pantheon in the Late Babylonian period – see further Section 7.2.3.

¹³³ *SpTU* 1, 2 obv. 20. For *labāšu* used to express disease (typically of the skin), with or without *zumru*, see *CAD* s.v. *labāšu* 1c) 2’, 3b) 2’; *CAD* s.v. *zumru* a) 2’.

euphemism for leprosy); the transfer of one of Šin's prerogatives to Anu would fit neatly with the theological manoeuvres of the Chronicle, which condemns Šulgi's excessive promotion of Šin and asserts Anu's supremacy.¹³⁴

The two chronicles also feature similar representational strategies. First, both draw upon the remote past, which by its very antiquity carried greater exemplary force than more recent history. Second, episodes of direct divine intervention play a central role in both. The physical manifestations and actions of Athana and Anu in the human sphere serve to mark the dramatic culmination and logical consequence of the narratives of piety and sacrilege: Athana 'stands over' the priests in their sleep, an anthropomorphic presence, and brings rain during the Persian siege; Anu visibly marks Šulgi's body. The action of the deities also adds divine sanction to the human paradigms constructed by each text: Athana's faithfulness to the Lindians confirms the correctness of the pattern of reverent behaviour mapped out by the offering list, while in the Uruk Chronicle the narrator's negative judgement of Šulgi's behaviour towards Uruk (and Babylon) is, according to the internal logic of the text, confirmed by the events which follow. Most importantly, the two chronicles suggest very similar conclusions: Athana and Anu are powerful deities, personally concerned with their respective sanctuaries at Lindos and Uruk, and they will intervene to protect the temples and their worshippers against all transgressions, even from those who wield the highest level of human power. Present and future rulers (and others) are presented with a clear paradigm to follow: honour the shrines in a measure befitting the importance of each deity and preserve the traditional rites, or risk dire consequences.

¹³⁴ The phrase which appears either immediately before or after the missing punishment, *šēressu rabītu*, is translated 'his (i.e. Šulgi's) great fault' by Glassner (2005: 289). However, this phrase with the meaning 'his (DN's) great punishment' is often used as a euphemism for or descriptor of leprosy (and occasionally of dropsy), e.g. *saḥaršubbā l[ā tēbā] šērtāšu rabīta lišaššīšu*, 'may (Šin) cause him to suffer incurable leprosy, his (Šin's) great punishment' (UET I 165 ii.25, a Neo-Babylonian *kudurru*); see further CAD s.v. *šērtu* B 2b), 1', 3'. In his edition in *SpTU* 1, 2, Hunger estimated that two signs are missing at the start of obv. 19 and three in obv. 20. I suggest the following restorations: [saḥar.šub.ba.]a *še-ret-su ra-bi-tu*₄ / [^{ld}šul]-gi *zu-mur-šu ú-lab-bi-š*, 'with [leprosy], his great punishment, he covered [Šulgi's] body'.

7.2.3 *Past and Present*

Of course, individuals and communities create this type of narrative about the past in various circumstances and for many reasons. But the contexts of the chronicles' creation and the precise paradigms they construct invite us to view them as parallel responses to the political situation in early Hellenistic Babylonia and late Hellenistic Rhodes. Both were written at a time when their communities were facing similar political challenges: a change in the ruling or hegemonic power, and a potential or actual decrease in their own importance. In the first half of the third century BC, the Urukian elite may have felt themselves in a rather uncertain situation. Long the pre-eminent city of southern Babylonia but in the shadow of Babylon during the earlier first millennium, under Late Achaemenid rule Uruk had established an increasing degree of local autonomy. When the dust settled on the chaotic years following Alexander's death, the Seleucids were in control of the region and active in Babylon, leaving Uruk more marginal within a western-facing empire.

During the first decades of Seleucid rule, it would not yet have been clear whether the city and its cults would retain their independence and attract royal patronage, or be marginalised or brought to heel by the foreign dynasty now installed in the northern capital. For better or worse, Babylon had a Greek garrison; the palace was at least sometimes occupied by the new rulers from the west, and Alexander's successors invested in the fabric and functioning of the city's temples.¹³⁵ Seleucid benefactions in northern Babylonia also included land grants and tax exemptions: Antiochus I made a grant of arable land to the citizens of Babylon, Borsippa and Kutha in the first year of his reign, though it was apparently later revoked when he was under pressure during the First Syrian War;¹³⁶ a cuneiform inscription on a now-lost monument from the reign of Seleucus II praises Antiochus II, his wife and sons for restoring (possibly the same) former crown lands to the Babylonians, Borsippans and Kuthaeans, and refers to tax exemptions made by Antiochus and confirmed by his successor

¹³⁵ See pages 223–4.

¹³⁶ *AD* –273B rev. 36'–8', with restorations and discussion by Van der Spek 1993: 67–70.

Seleucus.¹³⁷ What, if anything, the Seleucids did at Uruk during the early years of the dynasty is unclear. There is as yet no direct evidence for royal presence or benefactions in the city, and apart from the group of Macedonian-style burials nearby which indicate that certain individuals adopted elements of Hellenistic royal/elite material culture, the archaeological remains yield little sign of Graeco-Macedonian impact.¹³⁸ Under these circumstances, the future may well have seemed uncertain, even to temple scholars who spent much of their time predicting it.

A hundred and fifty years later Rhodes was in a similar position, having gradually lost its centrality in the eastern Mediterranean as the seat of power shifted westwards to Rome. Loss of favour with the new Mediterranean hegemon after the battle of Pydna had led to harsh reprisals, and the establishment of Delos as a free port redirected the channels of Mediterranean trade to Rhodes' economic detriment. Alain Bresson has cautioned against overly pessimistic reconstructions of Rhodes' situation at the beginning of the first century, emphasising the island's continued prosperity and the fact that by this point relations with Rome had improved.¹³⁹ Yet it remains true that the glory days of the high Hellenistic period, when Rhodes was wooed by kings and cities alike, were gone; Rhodes had effectively lost its independence and the island's role on the international stage was increasingly that of Rome's auxiliary.¹⁴⁰ Lindos may have felt the downturn particularly acutely: as Higbie notes, the remaining vestiges of the island's commercial and political power were now concentrated

¹³⁷ The text survives in two later copies, the so-called Lehmann tablet (MMA 86.11.299, 173/2 BC) and a duplicate (BM 47926+); for full edition and commentary see Van der Spek and Wallenfels 2014. A *terminus post quem* of 236 BC for the original monument is given by the date of the decree recorded at the beginning of the text. The fragmentary document on land and tithes published as *BCHP* 16 may refer to the same land grant. On Seleucid land policy in Babylonia, see further Van der Spek 1993.

¹³⁸ Cf. Monerie 2012: 329–30 who remarks on the silence of the early third-century cuneiform sources from Uruk regarding relations with the kings (but also notes the shift to registering contracts in Greek which meant a change in medium and hence for historians the loss of much documentation). On the tumuli, see Pedde 1991; 1995; Petrie 2002: 104–5; Baker 2013: 52–6. Pedde and Baker speculate that the tombs may include those of Anu-uballit/Nikarchos and Anu-uballit/Kephalon.

¹³⁹ Bresson 2006, esp. 532–4.

¹⁴⁰ Higbie 2003: 204–42; Shaya 2005: 434–5; Dillery 2015: 190. On Rhodes' changing fortunes during the Hellenistic period and fall from grace with Rome, see also Gruen 1975; Agre 1991.

in the central city of Rhodes, prompting the Lindians to look elsewhere for continued prestige and privilege.¹⁴¹

Under these circumstances, it is hard not to see the Lindos or Uruk Chronicles as compositions with powerful contemporary resonances, and their writing or copying as acts with a similar ideological and politicised intent. These documents which ‘proved’ the antiquity and prestige of each community could serve two important functions in the world of Hellenistic imperialism: first, they could affirm the community’s sense of its own identity at a moment when that identity seemed threatened, and second, they could potentially be used as ‘evidence’ to put pressure on powerful contemporary actors to continue a pattern of benefaction. It is explicit in the Lindian Chronicle that this text played a part in communal self-definition and cultural memory for its local audience. It may also, as Higbie suggests, have been part of an effort by the Lindians to attract visitors by investing in the documentation and monumentalisation of their past.¹⁴² But the crucial audience was surely more powerful and political. Illustrating the prestige of a temple could result in very material benefits, such as inviolability for both the sanctuary and its polis. Erected at the beginning of the first century as the monumentalised ‘proof’ of Athana Lindia’s power and glory, and by extension the importance of her sanctuary and city, the Lindian Chronicle seems a direct answer to the Lindians’ precarious position, facing an uncertain future under the increasingly oppressive shadow of Rome.

Meanwhile, as well as enhancing pride and cohesion among Anu’s followers at the Rēš, the Uruk Chronicle may also have been copied (and perhaps also originally composed) as part of an effort by the priesthood to show the new rulers the proper way to treat the city and its temple. Beaulieu and Cavigneaux have both interpreted the text in this way, connecting it with the so-called Uruk

¹⁴¹ Higbie 2003: 242; cf. Massar 2006: 38 for the way in which Lindos’ independence and prestige became increasingly focused on the cultic sphere after the synoecism with Rhodes.

¹⁴² Higbie 2003: 242, 291–2. Lippolis (1988: 117) also refers to the creation of a retrospective atmosphere at Lindos, providing an almost ‘touristic’ image for the Roman aristocracy.

Prophecy, an Akkadian *vaticinium ex eventu* composition which survives in a cuneiform copy from the same house in which the Chronicle was found.¹⁴³ The Prophecy ‘predicts’ the reigns of several archetypally ‘good’ and ‘bad’ kings who can be identified with historical rulers of Babylonia, before culminating with an ideal ruler from Uruk who will restore the local cult and whose dynasty will endure forever.¹⁴⁴ Beaulieu observed that both compositions share a preoccupation with rulers’ merits as protectors of cult centres, and the purpose he attributes to the Prophecy is equally applicable to the Chronicle: ‘to show to a Seleucid ruler of the first half of the third century the proper royal conduct toward the city’.¹⁴⁵ Beaulieu also suggested that the last bad king of the Prophecy could be equated with both Nabopolassar and Seleucus I, reflecting a perceived neglect of Uruk by both these rulers, while the ideal king would then signify Nebuchadnezzar and Antiochus I, expressing hopes that Seleucus’ successor would reverse his father’s policies and offer due patronage to Uruk.¹⁴⁶

Building on Beaulieu’s interpretation of the Prophecy and highlighting features of the narrative applied to Šulgi which seem more applicable to other rulers, Cavigneaux proposed that the Chronicle expresses frustration with early Seleucid treatment of Uruk in a similarly coded way, and that Šulgi is here an avatar for one or more earlier kings. While Šulgi certainly had a reputation for impiety in later Babylonian literary tradition, the promotion of Šin at the expense of Marduk and Babylon resonates most strongly with Nabonidus, who angered Marduk’s priesthood in Babylon by favouring Šin and his city, and according to a later Aramaic tradition attested at Qumran was punished with a skin disease.¹⁴⁷ But as with the Prophecy, Cavigneaux suggests that there may also be a Seleucid avatar: perhaps Seleucus I, who from an Urukian perspective may have seemed parallel to Nabonidus and Šulgi in his neglect of Anu and Uruk in favour of the cults and

¹⁴³ Beaulieu 1993; Cavigneaux 2005.

¹⁴⁴ *SpTU* 1, 3. The exact dating and interpretation of this composition are contentious; on this, and the interpretation of the Prophecy, see further Hunger and Kaufman 1975; Goldstein 1988; Ellis 1989; Beaulieu 1993; Scurlock 2007; Neujahr 2012: 50–8.

¹⁴⁵ Beaulieu 1993: 49. ¹⁴⁶ Beaulieu 1993: 47–50. ¹⁴⁷ Cavigneaux 2005: 69–72.

cities of the north.¹⁴⁸ Since the surviving exemplar of the Uruk Chronicle is a copy of an earlier tablet, both the Prophecy and Chronicle could have been composed in the early third century to support an overall narrative about the importance of Anu's cult and city which articulated local hopes that Antiochus I and his successors would offer patronage – thereby avoiding the fate of Šulgi/Seleucus as recounted in the Chronicle and realising the perfect paradigm of the new Nebuchadnezzar in the Prophecy.

Further evidence for the contemporary relevance of these texts comes from the precise links between the paradigmatic pasts they depict and the present in which they were written. First, both show a strong emphasis on royal or imperial benefaction, with obvious resonance for the Hellenistic kings and, later, the imperial representatives of Rome. The focus on kings and other powerful individuals is particularly significant with the Lindian Chronicle, where it would have been possible to stress offerings by cities to a greater extent. Here, the series of heroic leaders and great kings which runs from Homeric to Hellenistic *basileis* (and possibly to Roman donors in the broken section), creates a strong precedent for future benefaction even in a world of imperial superpowers.¹⁴⁹ In the Uruk case one might argue that the royal paradigm is simply determined by the political history of Babylonia, but here an additional element comes into play: the choice of ruler(s). Šulgi (like Seleucus and Nabonidus) was a powerful king from another city-state, who controlled a large territory; nonetheless, he is shown marginalising Uruk to his cost. The Uruk Chronicle thus deals with the treatment of Uruk within a larger imperial system, seeking to establish that its importance has always transcended

¹⁴⁸ Cavigneaux 2005: 70–2 (Cavigneaux does not speculate about the actions that might have triggered this identification, but cf. Beaulieu 1993: 49–50 on the foundation of Seleucia on the Tigris as part of Seleucus' 'somewhat hostile policies' which the authors of the Prophecy hoped might be reversed by his successor). Cavigneaux suggests that the similar root consonants of their names may have facilitated an equation between Šulgi and Seleucus (ŠLG and SLK). Cavigneaux's alternative suggestion (2005: 72) that Šulgi represents Antiochus I is less persuasive; in surviving sources Antiochus I appears as the most active of all the Seleucids in patronising Babylonian cult, the reign lengths do not match, and the Chronicle which describes Antiochus sacrificing to Šin (*BCHP* 5) refers to the Egnišnugal temple in Babylon, not Ur.

¹⁴⁹ On the possibility that Roman donors were included, see Marincola 2005.

the purely local and is equal to that of its long-time rival Babylon (or even greater, since despite Šulgi's sacrilege in Babylon it is Anu and not Marduk who eventually acts to punish him). This creates a paradigm particularly appropriate in the context of Seleucid rule.

Another parallel aspect of the chronicles especially relevant in a Hellenistic context is that both present their local sanctuary and city as central within a wider geographical and political framework, implicitly countering the competing claims of other communities. The Lindian Chronicle achieves this by constructing a web of dedicants representing communities across and beyond the Greek world: from Phalaris, tyrant of Akragas in the west, to the Phoenician culture-hero Kadmos; from Philip V of Macedon to the colonists of Cyrene. The Uruk Chronicle adopts the opposite strategy but to the same effect. Although Šulgi is explicitly stated to have reigned over 'all the lands', the Chronicle rapidly zooms in from references to foreign conquest to concentrate on royal interactions with the Uruk temple.¹⁵⁰ The sanctuaries of Babylon and Ur are also mentioned, but function primarily as support for the main narrative about Šulgi's sins at Uruk – Babylon as a rehearsal for the sacrilege he commits in Uruk, and Ur to underline his undue favouritism towards his dynastic seat. Both Lindos and Uruk are at the centres of their respective worlds: in the Lindian Chronicle the city of Athana Lindia assumes a position at the heart of the *oikoumene* because all the *oikoumene* is drawn to Lindos, while Babylonia's other major cities appear in the Uruk Chronicle only insofar as they shed further light on the destiny of Uruk.¹⁵¹ At a time when these communities risked losing their significance, such an image of the past may have played an important role in sustaining the Lindian and Urukean sense of civic and cultic identity.

If either the Lindian or Uruk Chronicle were an isolated example, these 'Hellenistic' features would be suggestive but far from decisive. However, both can be situated within a larger set of texts

¹⁵⁰ *SpTU* 1, 2 obv. 4.

¹⁵¹ Shaya 2005: 430 draws attention to the prominence of Lindian colonies in this Lindos-centric world.

from the Hellenistic period which share similar concerns.¹⁵² The Lindian Chronicle is, as we have already seen, one of many Greek historiographical texts from the Hellenistic period through which local communities turned to the past to assert their importance in the present. In a similar way, the Uruk Chronicle can be linked with a number of cuneiform texts from Hellenistic Babylonia which share a preoccupation with the vitality of local cults and their treatment by rulers. In Uruk, Beaulieu has argued that both the Chronicle and Prophecy are part of a cluster of ‘pseudo-historical’ texts produced by the Rēš priesthood in the early Hellenistic period to confer extra prestige and antiquity on the (in fact not terribly ancient) Anu cult and its practitioners.¹⁵³ Although the description ‘pseudo-historical’ is a somewhat unhelpful value judgement, in drawing attention to the constructed nature of these historical narratives Beaulieu enables us to situate the Uruk Chronicle within a particular set of concerns and historical (re)imaginings that characterised the milieu in which it was composed and recopied.

Broadening the focus to Babylonia as a whole, Geert de Breucker has analysed recurring motifs in Persian and Hellenistic cuneiform texts about former kings in terms of contemporary concerns over local autonomy and identity under foreign rule.¹⁵⁴ Observing that the motif of the king who sins against a particular deity and then repents seems to be new in the Hellenistic period, he suggests that ‘the topic of kings submitting themselves to a temple’s patron god enabled its community to define, or perhaps better, redefine its identity . . . It provided its members with self-consciousness in a world of foreign rulers and alien cultures’.¹⁵⁵ In the Greek world and Babylonia, in Greek and Akkadian, we see local scholars shaping and using the past in similar ways to address the same concerns in the present. Dillery’s statement about Greek local historiography is valid for the Babylonian compositions too:

¹⁵² See also Stevens 2016, which examines the Lindian Chronicle and a number of other Greek and Akkadian texts from the perspective of elite self-presentation and integration, arguing for historicising localism as a shared strategy in Greek and Babylonian contexts.

¹⁵³ Beaulieu 1993: 48–50 (50 for the Uruk Chronicle as a ‘pseudo-historical fabrication’).

¹⁵⁴ De Breucker 2015. ¹⁵⁵ De Breucker 2015: 90–1.

these documents enabled communities ‘to articulate their needs and aspirations in the wider context of the power dynamics of the age’.¹⁵⁶

7.2.4 *Local Voices, Imperial Audiences?*

Those power dynamics bring us finally to a deeper, although admittedly more speculative, link between the Greek and Babylonian local histories we have been examining. Were these texts designed not just to articulate local needs and aspirations for comparable audiences at home, but to advocate for local interests to the same set of royal interlocutors? If so, the parallels between them may reflect not just the transhistorical tendency of individuals and groups to react to the imposition of foreign rule in particular ways, but something specific about the imperial world of the Hellenistic period. Rather than simply responding to similar stimuli in similar ways, these Greek and Babylonian works of ‘local history’ may actually share a certain kind of persuasive language. On this reading, the elites of Babylon and Uruk were creating the same sort of local histories as their contemporaries in the Greek poleis not just because these were natural narratives to construct in a situation where local identity was under threat, but because they were the kind of narratives that could be expected to get concrete results in a specifically Hellenistic imperial context.

This idea takes inspiration from John Ma’s work on the shared language of reciprocity and benefaction constructed and utilised by the poleis of Asia Minor and the Seleucid kings. As Ma has demonstrated, a standard discourse emerges from interactions between kings and cities, where the language of civic euergetism is used by both sides to negotiate the often yawning chasm of real power relations.¹⁵⁷ This linguistic negotiation of power went far beyond Seleucid Asia Minor: Greek communities across the Hellenistic world used similar persuasive strategies in their exchanges with each other, the kings and later Rome. The discourse of euergetism was one strand in their arsenal of persuasion, but these communities frequently also drew on narratives about

¹⁵⁶ Dillery 2005: 521. ¹⁵⁷ Ma 1999.

the exemplary local past and the divine interventions of local deities. And these narratives led to results: royal correspondence from all the dynasties shows Greek cities successfully using claims about the past status of their polis or the power of their local deity to obtain a particular status or gift. For example, the inhabitants of Herakleia under Latmos and Zeuxis, the Seleucid governor, used the language of a shared (and constructed) Seleucid past to negotiate the city's status under Antiochus III.¹⁵⁸ Meanwhile, at Magnesia on the Maeander, an epiphany of Artemis Leukophryene formed a crucial part of the polis' case for recognition of her festival as *asylos* and panhellenic – recognition which was given by almost all the kings, and many Greek cities (all of whose responses the Magnesians published for posterity on the walls of the agora).¹⁵⁹ This, then, was a language of persuasion that was accepted by both civic and imperial interlocutors as efficacious. And some of the cities that used this language were not exactly 'Greek' by conventional standards. When we find Antioch in Persis, a new Seleucid foundation on the Persian Gulf and no doubt with a mixed population, acknowledging the Magnesians' claim to *asylia* on the basis of Artemis' manifest power and their shared stake in a splendid Hellenic past, the question arises of whether non-Greek communities learnt to talk to the Hellenistic powers in the same way.¹⁶⁰

Berossus' work has been read as an attempt to engage with the Seleucids and influence their behaviour towards Babylonia, encouraging them to adopt the mantle of Nebuchadnezzar and treat his city and its elites with respect.¹⁶¹ Despite the linguistic barrier, we might view the Akkadian compositions of Berossus' contemporaries in a similar light. It is possible that the Uruk Chronicle and related Hellenistic cuneiform texts, while conforming to traditional Babylonian ways of writing about the past, were also aimed in part at the new rulers of Babylonia, deliberately

¹⁵⁸ SEG 37.859 B; Ma 1999: 340–5. On the creation of a Seleucid past in Asia Minor and its advantages for rulers and ruled, see also Ma 1999: 26–52.

¹⁵⁹ The full dossier is republished with discussion and commentary in Rigsby 1996: 179–279; cf. Kuhrt and Sherwin-White 1993: 161–5. The epiphany is mentioned in the framing inscription, *I.Magnesia* 16, and referred to in many of the responses.

¹⁶⁰ Antioch in Persis decree: *OGIS* 233. ¹⁶¹ E.g. Kuhrt 1987: 56.

plugging into a discourse for political and economic transactions that transcended cultural and dynastic boundaries. Of course, the cuneiform documents which have survived to us would have had a very restricted readership. But, as Beaulieu points out, the restricted circulation of the cuneiform versions through which these compositions have been transmitted to us does not necessarily mean that their only audience in antiquity was the local priesthood.¹⁶² Aramaic or Greek versions may have existed, or the priests may have acted as interpreters, using their tablets as visual proof; one is reminded of the Egyptian priests ‘documenting’ their ancient history for Herodotus by pointing to the series of statues of high priests.¹⁶³ Were the priests of the Rēš temple preparing, in Akkadian, the supporting documents for their official ‘grant proposal’ to the Seleucid imperial centre? Perhaps we are simply lacking the Greek versions, and the reply, which, like other Seleucid communications to the cities of Babylonia, would have been written on a leather scroll and therefore would have gradually decayed in the temple archives along with the thousands of other administrative documents which have left only their clay sealings behind.

Despite the very real differences between them, the Chronicles of Lindos and Uruk exhibit deeper similarities. Revealing other dimensions to Hellenistic intellectual life beyond the Hellenocentric hubs which typically draw the focus of modern historians, they take us further into the local intellectual worlds we have explored through the careers of Semos, Anu-aḥa-ušabši and others. Notwithstanding their different cultural backgrounds, these men occupied comparable social and intellectual milieux, and their intellectual interests centred on their own community and region. In this respect, Greek scholars like Timachidas and Semos can be linked more closely with their Babylonian contemporaries than with their more famous compatriots at panhellenic intellectual hubs like Alexandria, whose lives and concerns were more cosmopolitan.

These local scholars of the Hellenistic world faced similar challenges arising from the integration of their communities

¹⁶² Beaulieu 1993: 49. ¹⁶³ Hdt. 2.143.

within parallel structures of Macedonian imperialism: a decrease in local autonomy, the imposition of new political and cultural practices, and the risk of being subsumed into a larger imperial unit. In some cases, they sought to meet these challenges in similar ways through their writings. The Lindos and Uruk Chronicles are cases in point: parallel examples of a type of local historiography which is ‘Hellenistic’ not just in its chronological setting, but also in its contexts, purposes and strategies. Both texts seek to articulate the continuing importance of two once-powerful cities, now increasingly insignificant within a vast political arena controlled by new dynastic and imperial forces who could not necessarily be expected to promote the interests of Athana or Anu and their devotees. Drawing upon the exemplary force of the past, the chronicles constituted proof of the glorious histories of Uruk and Lindos and their special relationship with their patron deities, creating a paradigm for human reverence and benefaction which would be valid across time, space and even cultural barriers.

At the very least, this paradigm could be expected to reaffirm community identity and social structures locally. But it may also reflect a Hellenistic rhetoric of political persuasion that was shared cross-culturally, and indicate that the chronicles were also intended for an imperial audience, deploying the sort of historical and cultic claims that were known to have political currency with Hellenistic rulers. Certainty is, as so often, impossible. Yet we might note with interest that it was shortly after Anu-balāssu-iqbi copied the Uruk Chronicle that the large-scale rebuilding programme sponsored by Anu-uballiṭ/Nikarchos was completed at the Rēš in Uruk.¹⁶⁴ The dedication of the building to ‘the life of’ the Seleucid kings, Anu-uballiṭ’s royally bestowed Greek name and the sheer scale of the restorations all strongly imply that the programme had attracted royal interest and support.¹⁶⁵ Meanwhile, the Lindian acropolis and its temple enjoyed continued investment in the later first century BC and well into the

¹⁶⁴ Cf. pages 226–7.

¹⁶⁵ Thus Kuhrt and Sherwin-White 1993: 154–5; Baker 2013: 56–7. At the same time, the fact that the restorations are in the name of the local governors rather than the king (in contrast to the work at Babylon and Borsippa recorded on the Antiochus Cylinder) may suggest a lack of interest: Lenzi 2008a: 157–8; Monerie 2012: 332.

7.2 Hellenistic Local Histories

Roman imperial period, with imposing new buildings and ever more dedications, their donors following the precedent set by the great heroes of old and charted in the offering list of the Lindian Chronicle.¹⁶⁶

Of course, sanctioning and investing in local communities' celebration of their history and cult was not an indication of Hellenistic rulers' benign interest in the continuation of local traditions. The encouragement of local diversity and a strong sense of local identity served imperial ends too, as a means of restricting mobility between local and imperial elites and reducing the possibility of a large-scale rebellion by united subject populations.¹⁶⁷ But as the first-century priests of Athana Lindia looked out at the array of new votive offerings from Greek and Roman donors following in the reverent footsteps of Menelaus, Darius and Alexander, or the *āšipus* of the Rēš prepared for the *akītu* festival of 250 BC in what was now one of the largest temples Mesopotamia had ever seen, such considerations are not likely to have been prominent in their minds. As for the two chronicles themselves, they did not remain in the sacred centres they were designed to glorify. The Uruk Chronicle ended up buried in the rubble of a family house, awaiting rediscovery two millennia later; the Lindian Chronicle was reused as a paving slab in the church of St Stephen at Lindos. But both, perhaps, had already served their purpose.

¹⁶⁶ On the additions to the temple precinct in the Late Hellenistic and Roman period, see Poulsen and Dyggve 1960.

¹⁶⁷ On this dimension to local patronage, see further Stevens 2016: 82–6; Ando 2010 (for the Roman imperial period).

EPILOGUE: TOWARDS A NEW HELLENISTIC
INTELLECTUAL HISTORY

The Hellenistic period saw the birth of Greek as a linguistic and cultural *koine* from the shores of the Mediterranean to the deserts of Margiana. It also heralded the death of cuneiform and the final disappearance of Akkadian, which had once been the *lingua franca* of the entire Ancient Near East. Just over a century after Anu-aḫa-ušabši's son copied the Uruk Chronicle, the number of cuneiform tablets from Uruk and Babylon begins to fall, marking the beginning of the end for a script that had lasted over three millennia and the scholarly tradition it had preserved.¹ The existence of some very late tablets shows that the demise of cuneiform was not a sudden collapse. In Babylon five astronomical Almanacs can be dated to the first century AD, the latest to AD 75; another Almanac from Uruk published by Hermann Hunger and Teije de Jong and dated astronomically to AD 79/80 has upended the previous consensus that cuneiform was obsolete in Uruk by the 90s BC, raising the possibility that here too, some scholarly activity endured into the first century AD.² Nevertheless, the bulk of the cuneiform documentation from both cities ends during the first century BC, with a tipping point in the later part of the second (Uruk) or early first (Babylon).³

¹ On the end of cuneiform culture, see Geller 1997 (much more optimistic than most); Oelsner 2002b; Brown 2008; Clancier 2009b: 308–16.

² Babylon almanacs: Sachs 1976. Uruk almanac: Hunger and de Jong 2014. The astronomical dating is, as the editors observe, not without difficulties. Moreover, the year to which the predictions relate need not coincide with the year of writing. It seems that observations from the 30s AD were used (Hunger and de Jong 2014: 191–2); even if the astronomical dating is correct, the date of writing could therefore be anywhere between AD 34 and 79.

³ Brown 2008; Clancier 2009b: 297–318. Brown places the 'tip' in the first century BC; in Uruk it is certainly earlier, as revealed by the steep fall in astronomical tablets in the

Long-term trends were undoubtedly in play here. The usage of cuneiform had been gradually declining for centuries, facilitated by macro-economic changes which ultimately sapped the resources of Babylonia's old cities and their temples, and the increasing availability of well-established alphabetic scripts which made cuneiform less appealing than it had been in the second millennium when fewer alternatives existed.⁴ But the precipitating factors usually posited for the final collapse are all connected to Babylonia's position within the wider Hellenistic world: administrative changes introduced by the Seleucids which reduced the contexts for the usage of cuneiform and later also the autonomy of the temple elites themselves; political and economic instability after the end of Seleucid rule which disrupted the functioning of the temples to the point where there were too few scholars left to perpetuate cuneiform intellectual culture; the translation of Babylonian astrological and astronomical techniques and concepts into Greek, which ultimately rendered obsolete the cuneiform scholarly tradition from which they were derived.⁵ On any of these models, the final death of cuneiform scholarship was triggered by political and cultural developments arising from Babylonia's place in the imperial system which emerged from the conquests of Alexander. Here, perhaps, is the most dramatic instance of the principle which this book has set out to demonstrate: that the intellectual culture of Hellenistic Babylonia is in a meaningful sense Hellenistic as well as Babylonian.

This is clearest when it comes to direct connections between Babylonian scholarship and that from other regions of the Hellenistic world. The rapid geographical spread and transformation of Babylonian astronomical and astrological concepts in the later first millennium offers a spectacular demonstration of the

later second century (Clancier 2009b: 310) and the fact that the latest datable literary and administrative texts are from this time (Brown 2008: 84–90). At Babylon astronomical tablets remain numerous until the early first century BC (Clancier 2009b: 310), but administrative tablets are scarce from the mid-second century onwards (Brown 2008: 85).

⁴ Brown 2008: 74–81.

⁵ Administrative changes under the Seleucids: Brown 2008: 84; Clancier and Monerie 2015. Instability or cultural change after the Parthian conquest: Oelsner 1978: 115–16; Clancier 2009b: 309–17; change of language and medium for astral scholarship: Brown 2008: 88–94.

connectivity that could and did take place between cultural and intellectual traditions we tend to see proceeding in isolation. Despite our lack of knowledge about the key mechanisms of contact in this case, Berossus and Sudines, who were capable of engaging in a sophisticated way with both Babylonian and Greek texts and traditions, provide one illustration of how such connectivity might be realised on the individual level. Meanwhile, despite the uncertainties surrounding their interpretation, the Graeco-Babyloniaca tablets attest to a degree of bilingualism in the education of the Babylonian elite which may have been the starting point for the processes by which elements of Babylonian astral science ended up beneath the sands of Egypt, on top of a mountain in southeast Anatolia, and on the Mediterranean seabed.

Such cross-cultural connections do not seem to have been royally driven or facilitated. Neither the Seleucids nor their dynastic competitors played a key role in supporting or disseminating Babylonian scholarship. Apart from Berossus, the sources draw no links between Seleucids and Babylonian scholars, and Berossus' own tie to the court is tenuous at best. The scholars whom the Hellenistic kings fostered were Greek, at least in their intellectual formation, and so were the centres of learning they created and supported. When the Alexandrians 'educated all the Greeks and barbarians', as Athenaeus claimed, it was with Greek *paideia*, not Egyptian or Babylonian learning;⁶ it was Greek *paideia* to which the scholars and books collected by the Ptolemies were dedicated. The surviving sources suggest that neither in its collections nor in its organisation and overall conception did the Library of Alexandria owe anything to the cuneiform scholarship of Mesopotamia. The inspiration for the Ptolemaic Library can be adequately accounted for in Greek and Macedonian terms, and if Berossus' work ended up there, it was not as part of a Ptolemaic drive to collect the intellectual heritage of Egypt and Mesopotamia. Callimachus' scornful rejection of the filth-swollen Assyrian river in favour of the pure stream of Deo's (Hellenic) fountain was perhaps not intended as a programmatic statement about

⁶ Ath. 4.184b.

the cultural selectivity of Alexandrian scholarship, but it provides an effective encapsulation.⁷

Yet as we have seen, the Seleucids did engage with the members of the Babylonian elite whose scholarly activity survives to us in cuneiform. The Antiochus Cylinder, the Astronomical Diaries and the building inscriptions of the Anu-uballīt from Uruk attest to close collaboration between the temple elites of Babylonia and the Seleucid rulers, who worked together to represent the Macedonian conquerors as good Babylonian kings, heirs to the legacy of Nebuchadnezzar. There were advantages for both sides: for the Seleucids, greater stability in one province of their increasingly fractured empire; for the Babylonians, continuity in cultic practice and local autonomy, at least in the third century BC. The fact that the Seleucids were interested in the scholars of Esagila more for their cultural legitimisation than their astronomical expertise does not make this cross-cultural engagement less meaningful. Comparison with these more openly transactional interactions also helps to highlight the pragmatic dimensions of rulers' relationships with Greek intellectual figures. The learned kings of the Hellenistic world did not only pursue *paideia* for its own sake, but for its cultural cachet with their Greek elite subjects and for the political capital offered by the literati they cultivated. In political terms Babylonian and Greek scholars played parallel roles for the Hellenistic rulers, acting as cultural mediators and enabling them to cast themselves in local idioms in order to maintain good relations with their subjects.

By moving beyond the cases of direct contact to trace these kinds of parallels we can draw new connections between Greek and Babylonian scholarship in the period after Alexander. The cuneiform scholars of Hellenistic Babylon and Uruk were part of the same overarching imperial system as Greek intellectuals thousands of miles away, and their lives and work were affected by some of the same events and pressures. If we move beyond the hyper-Hellenic centres which dominate both ancient and modern conceptions of 'Hellenistic' intellectual life, Anu-aḫa-ušabši, Anu-aba-utēr and the other scholars of Uruk can be

⁷ Callim. *Hymn* 2.108–12.

situated alongside their Greek contemporaries within broader patterns and trends in intellectual life in the Hellenistic world.

Even when we cannot link Greek and Babylonian scholars through direct contact, their writings can be seen to reflect the impact of the same large-scale political and socio-cultural changes. The conquest and settlement of the Near East under Alexander and his successors transformed political, cultural and economic relations between the Greek world and Babylonia, with a corresponding effect on geographical knowledge and perceptions in both regions. New information about the world east of the Taurus Mountains flooded back to Greece with returning veterans and along the exchange networks which sprang up to serve the new Greek cities strung out along Alexander's route to the outermost reaches of what is now Afghanistan. Along some of those same networks, as well as through channels created by the peripatetic nature of Seleucid kingship and ongoing military activity in the west, cuneiform scholars in Babylonia gained information about places and events on and beyond the 'sea of the sunset'. We have mapped the resulting changes in Greek and Babylonian intellectual geographies through the works of Aristotle and Theophrastus and the Babylonian Astronomical Diaries and Chronicles. Although their intellectual programmes were different, these scholars from Athens and Babylon both made use of new knowledge about formerly distant places which became available due to their incorporation into the same overarching imperial framework. Furthermore, both seem to have had, like modern scholars of the Hellenistic world, a similar conception of that wider framework as a connected whole.

Some Greek and Babylonian writers also felt similar anxieties about the impact of that imperial framework on their own communities and articulated these concerns in similar ways. Tracing the parallel lives of Semos and Anu-aḥa-ušabši takes us into worlds of local scholarship far removed from the cosmopolitan centres which dominate our view of Hellenistic intellectual life, and allows us to draw further cross-cultural connections. Across the Greek-speaking world there existed many local scholars whose background, careers and interests link them more closely to the cuneiform scholars of Uruk than to the Greek scholars of

Alexandria or Pergamon. They represent a type of locally focused intellectual activity which, while not unique to the Hellenistic period, is an important part of the mosaic of different contexts, protagonists and activities that made up intellectual life in the Hellenistic world as a whole. Their writings can also be seen as 'Hellenistic' in the stronger sense that they respond in similar ways to concerns about local status and identity which arose from the same set of large-scale political developments. The Lindos and Uruk Chronicles, and other works of Greek and Akkadian historiography, show us Greek and Babylonian scholars using similar constructions of the past to stress the continuing importance of their communities in a world where local autonomy and identity might need to be reasserted or reformulated in the face of new imperial powers. Those imperial powers may even, sometimes, have listened.

It would be unwise to overstress the similarities or connections between cuneiform and Greek scholarship during the Hellenistic period. Much of the intellectual activity to which men like Anu-ah-a-ušabši devoted themselves was very different to that of a Semos or Anaxandridas, and does not obviously take much account of the wider contemporary world. The Urukean scholars' astronomical calculations, horoscopy or exegesis of Akkadian texts which dealt with schematic and archaising geographical constructions present a stark contrast with the geographical and ethnographical interests of many Hellenistic Greek writers. Apart from the rare cases of direct cross-cultural engagement, these intellectuals often seem to be operating in different worlds, and it is quite likely that they themselves would have agreed with this assessment. Nevertheless, the preceding chapters have provided some arguments for the view that even where we cannot link them directly, Greek and Babylonian scholars were in a meaningful sense part of the same world, insofar as we can trace its impact on their writings in similar ways.

These arguments are inevitably preliminary. The approaches used here need to be extended to further texts and parallels to reach a full assessment of how, and to what extent, different Greek and Babylonian intellectual centres were integrated into broader Hellenistic networks. The answer is likely to vary from

one centre to another: does the absence of Astronomical Diaries and Chronicles about contemporary events from Hellenistic Uruk, for instance, indicate that scholars there engaged less with the wider world than those at Babylon, or is this just a result of the random patterns which govern source survival and recovery? As for the project of writing intellectual histories of the Hellenistic world with a cross-cultural dimension, this book is only the [first chapter](#), or perhaps better, the prolegomenon, to such an undertaking. Similar soundings need to be taken of other regions and cultures to test whether the arguments posited here for Seleucid Babylonia have a wider application. Was Ptolemaic engagement with the temple scholars of Egypt deeper than Seleucid investment in cuneiform culture? How do reflections of kingship in Egyptian sources compare with those from Babylonia, and what can we extrapolate about attitudes to Hellenistic rulers? How far do the features of intellectual life we have posited as characteristically Hellenistic represent continuity from the time of the Persian Empire or endure into the Roman world?

These and many other questions about the relationship between Greek and Babylonian intellectual cultures, as well as the broader topic of cross-cultural connections in the Hellenistic world, are beyond the scope of this study. Some of them are also unanswerable on the current state of the evidence. It is likely that further excavation and publication of material from Hellenistic Babylonia will alter our understanding of intellectual culture in the region and its relationship to the wider Hellenistic world, perhaps profoundly so. Yet we do not, I think, need to wait until then before writing Babylonia and its cuneiform scholars into Hellenistic intellectual history. As intended by their founders, the Museum and Library of Alexandria, beacons of Hellenism, have dominated western conceptions of Hellenistic intellectual life since the Hellenistic period itself, and will naturally continue to do so. But in the shadows outside their far-reaching but narrow beam are many individuals, Greek and Babylonian, whose careers and writings can tell us just as much, if not more, about what it meant to be a 'Hellenistic' scholar, and indeed an inhabitant of the wider Hellenistic world. The final word I give to Herodikos of Babylon, grammarian and

philosopher, pupil of Crates, who expressed the underlying premise of this book perfectly over two thousand years ago.⁸

φεύγετ', Ἀριστάρχειοι, ἐπ' εὐρέα νῶτα θαλάττης
Ἑλλάδα, τῆς ξουθῆς δειλότεροι κεμάδος,
γωνιοβόμβυκες, μονοσύλλαβοι, οἷσι μέμηλε
τὸ σφῖν καὶ σφῶιν καὶ τὸ μιν ἡδὲ τὸ νίν.
τοῦθ' ὑμῖν εἶη δυσπέμφελον· Ἡροδίκῳ δὲ
Ἑλλάς ἀεὶ μίμνοι καὶ θεόπαις Βαβυλῶν.

Flee, Aristarcheans, over the broad back of the sea
from Hellas, you who are more cowardly than the skittish fawn,
droners-in-corners, dealers in monosyllables, who busy yourselves with
sphin and *sphoin* and *min* and *nin*.
May that be your fate – a storm-tossed one; but for Herodikos
may Hellas always remain, and the child of the gods, Babylon.

⁸ SH 494 = Ath. 5.222a.

GLOSSARY OF SELECTED PLACES, DEITIES AND TECHNICAL TERMS

The glossary is intended simply as a guide for the reader; some of the precise definitions of these terms are contested and discussed in full in the book.

Akkad Ancient region and kingdom of **Mesopotamia** in northern **Babylonia**.

Akkadian Ancient Semitic language related to Hebrew and Arabic, spoken in **Mesopotamia** (ancient Iraq) from the fourth millennium BC to the middle of the first millennium; used as a language of scholarship and ritual until the first century AD.

Almanac; Normal Star Almanac Astronomical **cuneiform** text which uses observational data and knowledge of **period relations** to calculate the dates and positions of particular celestial phenomena for a future target year, structured according to month and day. Almanacs chart positions according to the planets' movements through the **zodiac**; Normal Star Almanacs according to their movements in relation to a set of reference stars.

Antu Mesopotamian goddess, consort of **Anu**.

Anu Mesopotamian sky god, originally head of the pantheon; patron deity of the city of Uruk in southern **Babylonia**.

āšipu (Akk.) Mesopotamian medical, cultic and scholarly practitioner who specialised in the diagnosis and treatment of illnesses and apotropaic cultic rituals, often by means of incantations. Typically translated 'incantation priest' or 'exorcist'. In the first millennium BC, also known as *mašmaššu*.

āšipūtu (Akk.) The craft of the **āšipu**; the set of core texts associated with the discipline.

Aššur Mesopotamian god, patron deity of the city of Assur in **Assyria**.

Assyria The northern part of **Mesopotamia** (ancient Iraq).

astrology Form of divination which derives predictions about future events from phenomena in the sky which are deemed to be of ominous significance.

Astronomical Diaries **Akkadian** texts from Babylon (seventh to first centuries BC) containing daily and nightly observations of significant celestial phenomena and records of selected terrestrial events at the end of each month.

astronomy In modern usage, a scientific discipline which derives descriptive and predictive models of the universe using empirical and mathematical means.

auxiliary table In Babylonian mathematical **astronomy**, a table containing mathematical calculations and values used to construct **ephemerides**.

Babylonia The southern part of **Mesopotamia** (ancient Iraq).

bārû (Akk.) Mesopotamian specialist in liver divination.

Bārûtu (Akk.) The craft of the **bārû**; the standard series of liver omens associated with the discipline.

catchline On a **cuneiform** tablet which forms part of a series, the first line of the next tablet in the series, written at the end of the current tablet.

colophon Section at the end of a **cuneiform** tablet, or papyrus/parchment roll, containing paratextual information such as the name of the owner or scribe of the text, the title of the composition, the date or the number of lines.

compilation text See **excerpt text**.

copying statement In **colophons** of scholarly **cuneiform** tablets, a statement about the source from which the current copy has been made.

cuneiform Script used in ancient **Mesopotamia** and other parts of the Near East, originally developed to write **Sumerian** but adapted for **Akkadian** and several other languages. Sumero-Akkadian cuneiform is partly syllabic (one sign stands for a syllable, e.g. *a*, *ba*) and partly logographic (one sign stands for a whole word, e.g. A = *māru*, 'son'); some other versions of the script are alphabetic (e.g. Old Persian). The earliest known writing system, in use from the fourth millennium BC to the first century AD.

diadochi The rival generals of Alexander the Great who, after his death, fought for control of his empire in the late fourth and early third century BC.

dodekatemoron In Greek **astrology**, a twelfth-part or thirteenth-part subdivision of a **zodiac** sign created using one of several mathematical schemes to form a mini-zodiac within each sign; *or*, a point on the **ecliptic** in one zodiac sign which is associated with another point in a different zodiac sign using one of the schemes. See also **microzodiac**.

Ea Mesopotamian god of wisdom who lives in the subterranean waters of the Apsû; one of the supreme deities (with **Anu** and **Enlil**). Patron deity of the city of Eridu in southern **Babylonia**.

ecliptic A circle on the celestial sphere at the centre of the zodiac circle, tracing the apparent path travelled by the Sun through the stars over the course of a **solar year** as viewed from Earth; the plane of this path.

Enlil Mesopotamian god, one of the supreme deities (with **Anu** and **Ea**). Patron deity of the city of Nippur in **Babylonia**.

Enūma Anu Enlil (Akk.) **Akkadian** series of celestial omens, covering some 70 tablets, divided into sections on the Moon, Sun, planets and weather. A 'scribe of *Enūma Anu Enlil*' denotes a specialist in celestial scholarship.

ephemeris In Babylonian mathematical **astronomy**, a table which uses arithmetical operations to calculate the dates and positions of the Moon or a planet at significant phases in its cycle as observed from Earth (such as first visibility after sunset).

excerpt text In **cuneiform** scholarship, a manuscript containing excerpts from a single text or multiple compositions (common with omen series).

Glossary

- extispicy** Form of divination which derives predictions about the future by interpreting visible features of the entrails (usually the liver and gallbladder) of a sacrificed animal. See also *bārû*, *Bārûtu*.
- genethliology** Birth **astrology**; the practice of deriving predictions about an individual's life from phenomena thought to be of ominous significance which happened at or near the time of their birth.
- Goal-Year Text** Astronomical **cuneiform** text which uses observational data and knowledge of **period relations** to calculate the dates and positions of particular celestial phenomena for a future target year, organised into sections for each celestial body.
- Great Year** In ancient and medieval **astronomy**, the length of time thought to be required for all celestial bodies to return to the same positions in the sky as observed from Earth, variously calculated.
- horoscope** Text recording the positions of the Moon and planets in the **zodiac** at the time of an individual's birth, and other celestial phenomena deemed significant on or near the date; used in **genethliology** to derive predictions about the future of the individual.
- hour, equinoctial** Division of day and night into equal time segments which remains constant across different seasons, latitudes and weather conditions.
- hour, seasonal** Division of the period of daylight or darkness into equal time segments (usually 1/12), which varies according to the time of year, latitude and weather conditions (since these affect the length of daylight).
- incipit** The first few words of a **Sumerian** or **Akkadian** composition, typically used as a title by ancient (and sometimes also modern) scholars. E.g. *Enūma Anu Enlil* 'When (the gods) Anu, Enlil' is the incipit and title of the Mesopotamian celestial omen series.
- intercalation** The practice of adding in one or more extra days or months in certain years to ensure that the calendar does not fall out of step with the seasons (due to lack of alignment between calendars and the **solar year**).
- Kalendartext** Babylonian astrological text which links days of the ideal 360-day year with points on the **ecliptic** using a **microzodiac** scheme, and assigns to each one significant trees, plants, stones, animal parts and spells or ritual instructions.
- kalû (Akk.)** Mesopotamian cultic and scholarly practitioner who specialised in the performance of temple music and songs designed to appease the gods, often by means of ritual lamentation. Typically translated 'lamentation priest'.
- kalûtu (Akk.)** The craft of the *kalû*; core texts associated with the discipline.
- Marduk** Mesopotamian god, head of the pantheon in the first millennium; patron deity of the city of Babylon.
- mašmaššu (Akk.)** See *āšipu*.
- Mesopotamia** Area equivalent to modern Iraq and parts of Iran, Syria and Turkey, comprising **Assyria** (north) and **Babylonia** (south).
- Metonic Cycle** Period of almost nineteen years where the **lunar month** and **solar year** coincide, used by ancient astronomers to develop consistent **intercalation** schemes.

microzodiac In Babylonian or Greek **astrology**, a twelfth-part or thirteenth-part subdivision of a **zodiac sign** created using one of several mathematical schemes to form a mini-zodiac within each sign; *or*, a point on the **ecliptic** in one zodiac sign which is associated with another point in a different zodiac sign using one of the schemes. See also **dodekatemorion**.

month, lunar The length of time between two successive new moons (synodic month) or the length of time taken for the Moon to return to the same place in the sky (i.e. complete one orbit of the Earth) measured against the background stars (sidereal month).

MUL.APIN ('Plough Star') **Akkadian** astronomical compendium compiled in the early first millennium BC.

Nabû Mesopotamian god of writing and scholarship; son of **Marduk**; patron deity of the city of Borsippa in **Babylonia**.

parapegma In the Graeco-Roman world, list or table of dates of solstices, equinoxes and annual risings and settings of fixed stars, sometimes also including weather predictions. The term derives from the fact that stone parapegmata contained holes into which a peg would be placed to indicate the current date.

period relations Observed relationships between the different periodicities of celestial bodies (i.e. the repeating time periods in which they appear to an observer to traverse the same paths in the sky), used by Babylonian astronomers to predict future celestial events.

Saros Cycle A period of 223 (lunar) months after which the Sun, Moon and Earth return to approximately the same relative positions in space. Used in antiquity to predict the occurrence of eclipses.

Šarpanītu(m) Mesopotamian goddess, consort of **Marduk**.

Šin **Mesopotamian** moon god: patron deity of the city of Ur in **Babylonia**.

Sumer Region in southern **Babylonia**, south of **Akkad**.

Sumerian Language used in ancient **Mesopotamia**, attested in writing from the fourth millennium onwards and preserved as a language of scholarship and cult after its death as a spoken tongue in the second millennium BC until the end of **cuneiform** writing in the first century AD.

System A In Babylonian **astronomy**, a mathematical scheme for modelling the movement of the Moon and planets based on step functions (the changing velocity of an object is modelled as jumping between two or more constant speeds).

System B In Babylonian astronomy, a mathematical scheme for modelling the movement of the Moon and planets based on linear zigzag functions (the changing velocity of an object is modelled by assuming that it increases and decreases at a constant rate between a minimum and maximum speed).

Terms (Gk *horia*) In Greek **astrology**, subdivisions of each **zodiac sign** into segments of varying size which, using one of a number of schemes, are then assigned to one of the planets as 'ruler' or 'lord', so that each planet has rulership of one Term per sign. When a planet was in its Terms it was thought to have greater influence than usual.

Glossary

trine In Greek **astrology**, one of several astrologically significant ‘aspects’: angular relationships between the heavenly bodies in a **horoscope**, created by arranging the **zodiac signs** in a circle and linking them through various geometrical figures. Trine denotes a relationship of 120 degrees between three signs (or planets within signs).

UŠ (‘degree’) A Babylonian unit of arc length and time, which denotes 1/360th of the **uniform zodiac** or the time taken for 1/360th of the zodiac to pass above the horizon as seen from Earth (= 4 minutes).

vaticinium ex eventu Text which offers ‘prophecies’ or ‘predictions’ of events which can be recognised (on the basis of the descriptions) as historical.

year, sidereal The length of time taken for the Sun to return to the same position in the sky (i.e. for the Earth to orbit the Sun), measured with reference to the background stars (ca. 20 minutes longer than the **solar/tropical year**).

year, solar/tropical The length of time taken for the Sun to return to the same position (i.e. for the Earth to orbit the Sun), measured with respect to the seasons, i.e. in relation to the equinoxes (ca. 20 minutes shorter than the **sidereal year**).

zodiac circle The circular belt through the heavens extending on either side of the **ecliptic**, within which the planets are observed to travel and within which ancient observers identified a set of significant constellations (zodiacal constellations).

zodiac sign One of twelve equal segments of the **uniform zodiac** associated with a particular zodiacal constellation. In ancient and medieval **astrology**, characteristics associated with each sign and significant relationships between them were used to derive predictions.

zodiac, uniform Division of the **zodiac circle** into twelve equal segments of thirty degrees, each associated with one zodiacal constellation. In origin, a celestial co-ordinate system for charting positions and movements of celestial bodies; also used in **astrology** (see **zodiac sign**).

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